



## **DEPARTMENT OF THE INTERIOR**

### **Fish and Wildlife Service**

#### **50 CFR Part 17**

**[Docket No. FWS–R8– ES–2013–0011; 4500030114]**

**RIN 1018–AZ44**

### **Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-billed Cuckoo**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the western distinct population segment of the yellow-billed cuckoo (western yellow-billed cuckoo) (*Coccyzus americanus*) under the Endangered Species Act. In total, approximately 546,335 acres (221,094 hectares) are being proposed for designation as critical habitat in Arizona, California, Colorado, Idaho, Nevada, New Mexico, Texas, Utah, and Wyoming. The effect of this regulation, if finalized, is to

designate critical habitat for the western yellow-billed cuckoo under the Endangered Species Act.

**DATES:** We will accept comments received or postmarked on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** section, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal:

*http://www.regulations.gov*. In the Search box, enter Docket No. FWS–R8–ES–2013–0011, which is the docket number for this rulemaking. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on “Comment Now!”

(2) *By hard copy:* Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R8–ES–2013–0011; U.S. Fish and Wildlife Service Headquarters, MS: BPHC, 5275 Leesburg Pike, Falls Church, VA 22204-3803.

We request that you send comments only by the methods described above. We

will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the **Information Requested** section below for more information).

The coordinates or plot points or both from which the critical habitat maps are generated are included in the administrative record for this rulemaking and are available at <http://www.regulations.gov> at Docket No. FWS-R8-ES-2013-0011, and at the Sacramento Fish and Wildlife Office at <http://www.fws.gov/sacramento> (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this critical habitat designation will also be available at the Fish and Wildlife Service website and field office set out above, and may also be included in the preamble of this rule or at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Jen Norris, Field Supervisor, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, Room W-2605, Sacramento, California 95825; by telephone 916-414-6600; or by facsimile 916-414-6712. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

#### **SUPPLEMENTARY INFORMATION:**

##### **Executive Summary**

*Why we need to publish a rule.* Under the Endangered Species Act, any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule. On October 3, 2013, we proposed listing the western yellow-billed cuckoo as a threatened species (78 FR 61621).

Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The critical habitat areas we are proposing to designate in this rule constitute our current best assessment of the areas that meet the definition of critical habitat for the western yellow-billed cuckoo.

*This is a proposed rule to designate critical habitat for the western yellow-billed cuckoo.* This proposed designation of critical habitat identifies areas based on the best scientific and commercial information available that we have determined are essential to the conservation of the species. The proposed critical habitat is located in the States of Arizona, California, Colorado, Idaho, Nevada, New Mexico, Texas, Utah, and Wyoming.

*We have prepared a draft economic analysis of the proposed designation of critical habitat.* In order to consider economic impacts, we have prepared an analysis of the economic impacts of the proposed critical habitat designation and related factors. The

supporting information we used in determining the economic impacts of the proposed critical habitat is summarized in this proposed rule (see **Consideration of Economic Impacts**) and is available at <http://www.regulations.gov> at Docket No. FWS–R8– ES– 2013–0011 and at the Sacramento Fish and Wildlife Office at <http://www.fws.gov/sacramento> (see **FOR FURTHER INFORMATION CONTACT**).

*We are seeking peer review and public comment.* We are seeking comments and soliciting information from knowledgeable individuals with scientific expertise to review our analysis of the best available science and application of that science and to provide any additional scientific information to improve this proposed rule. Because we will consider all comments and information we receive during the comment period, our final determination may differ from this proposal.

### **Information Requested**

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The western yellow-billed cuckoo's biology and range; habitat requirements for feeding, breeding, and sheltering; and the locations of any additional populations.

(2) The reasons why we should or should not designate habitat as “critical habitat” under section 4 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), including whether there are threats to the western yellow-billed cuckoo from human activity that can be expected to increase due to the designation, and whether that increase in threat outweighs the benefit of designation such that the designation of critical habitat may not be prudent.

(3) Specific information on:

(a) The amount and distribution of western yellow-billed cuckoo habitat;

(b) What areas occupied at the time of listing (i.e., are currently occupied), that contain features essential to the conservation of the western yellow-billed cuckoo, should be included in the critical habitat designation and why;

(c) Special management considerations or protection that may be needed in areas we are proposing as critical habitat, including managing for the potential effects of climate change; and

(d) What areas not occupied at the time of listing are essential for the conservation of the western yellow-billed cuckoo and why.

(4) For Unit 52 (*NM-8 Middle Rio Grande I; New Mexico*), we have determined that it is appropriate to propose critical habitat into the conservation pool area of Elephant Butte Reservoir down to approximately river-mile (RM) 54. This is based on the number of yellow-billed cuckoo breeding pairs identified in the area, the amount of habitat

available, and the relationship and importance of the Elephant Butte Reservoir and Rio Grande River to other yellow-billed cuckoo habitat in New Mexico and the southwest. Additional habitat and western yellow-billed cuckoo breeding occurrences are located downstream to approximately RM 42. We seek information on whether the area or portions of the area to RM 42 at Elephant Butte Reservoir in New Mexico is essential to the conservation of the species and whether we should include the area as critical habitat for the species and why.

(5) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and for those specific areas whether the benefits of potentially excluding them outweigh the benefits of including them, pursuant to section 4(b)(2) of the Act. For specific lands that we should consider for exclusion under section 4(b)(2) of the Act, please provide us management plans, conservation easements, agreements, habitat conservation plans (HCP), or other appropriate information, that describe the commitment and assurances of protection of the physical or biological features of western yellow-billed cuckoo critical habitat; property boundaries; western yellow-billed cuckoo status, distribution, and abundance; and management actions to protect the physical or biological features of the western yellow-billed cuckoo.

(6) Land use designations and current or planned activities in the subject areas, and their possible impacts on the proposed critical habitat.

(7) Information on the projected and reasonably likely impacts of climate change on the western yellow-billed cuckoo and proposed critical habitat.

(8) Any probable economic, national security, or other relevant impacts of designating as critical habitat any particular area that may be included in the final designation and the benefits of including or excluding areas where these impacts occur.

(9) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We request that you send comments only by the methods described in the **ADDRESSES** section.

We will post your entire comment—including your personal identifying information—on <http://www.regulations.gov>. You may request at the top of your document that we withhold personal information such as your street address, phone number, or e-mail address from public review; however, we cannot guarantee that we



will be able to do so.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

### **Previous Federal Actions**

All previous Federal actions are described in the proposal to list the western yellow-billed cuckoo as a threatened species under the Act published previously in the **Federal Register** on October 3, 2013 (78 FR 61621). Please see that document for actions leading to this proposed designation of critical habitat.

### **Background**

It is our intent to discuss below only those topics directly relevant to the designation of critical habitat for the western yellow-billed cuckoo. For a thorough assessment of the species' biology and natural history, including limiting factors and species resource needs, please refer to the proposal to list this species as threatened published previously in the **Federal Register** on October 3, 2013 (78 FR 61621) (available at <http://www.regulations.gov> at Docket No. FWS-R8-ES-2013-0104).

## **Critical Habitat**

### *Background*

Critical habitat is defined in section 3 of the Act as:

- (1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features
  - (a) Essential to the conservation of the species and
  - (b) Which may require special management considerations or protection; and
- (2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures which are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management, such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the U.S. Fish and Wildlife Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public access to private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner seeks or requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply. In the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) essential to the conservation of the species, and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features essential to the conservation of the species (such as space, food, cover,

and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing and which is outside the geographical area (range) considered occupied at the time of listing may be essential for the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species at the time of listing only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and

General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we determine which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. Climate change will be a particular challenge for biodiversity because the interaction of additional stressors associated with climate change and current stressors may push species beyond their ability to survive (Lovejoy 2005, pp. 325–326). The synergistic implications of climate change and habitat fragmentation are the most threatening facet of climate change for biodiversity (Hannah and Lovejoy 2005, p.4). Current climate change predictions for terrestrial areas in the Northern Hemisphere indicate warmer air temperatures, more intense precipitation events, and increased summer continental drying (Field *et al.* 1999, pp. 1–3; Hayhoe *et al.* 2004, p. 12422; Cayan *et al.* 2005, p. 6;

Intergovernmental Panel on Climate Change (IPCC) 2007, p. 1181). Climate change may lead to increased frequency and duration of severe storms and droughts (McLaughlin *et al.* 2002, p. 6074; Cook *et al.* 2004, p. 1015; Golladay *et al.* 2004, p. 504).

We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For this reason, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

*Physical or Biological Features*

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species, and which require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features required for the western yellow-billed cuckoo from studies of this species' habitat, ecology, and life history, as described below. Additional information can be found in the proposed listing rule published in the **Federal Register** on October 3, 2013 (78 FR 61621). The physical or biological features identified here focus primarily on breeding habitat and secondarily on foraging habitat because most of the habitat relationship research data derive from studies of these activities. Much less is known about migration stopover or dispersal habitat within the breeding range, but based on the best scientific evidence we conclude that

these additional activities require the same types of habitat as breeding and foraging and that conservation of sufficient habitat for breeding and foraging will also provide sufficient habitat for the other activities. We have determined that the following physical or biological features are essential to the western yellow-billed cuckoo.

#### Space for Individual and Population Growth and for Normal Behavior

The western yellow-billed cuckoo breeds in riparian habitat along low-gradient (surface slope less than 3 percent) rivers and streams, and in open riverine valleys that provide wide floodplain conditions (greater than 325 ft (100 m)). Within the boundaries of the distinct population segment (DPS) (see Figure 2 at 78 FR 61631, in the proposed listing rule (78 FR 61621; October 3, 2013)) these riparian areas are located from southern British Columbia, Canada, to southern Sinaloa, Mexico, and may occur from sea level to 7,000 feet (ft) (2,154 meters (m)) (or slightly higher in western Colorado, Utah, and Wyoming) in elevation. Because critical habitat only applies to areas within the United States, we did not examine areas in Canada and Mexico. The moist conditions that support riparian plant communities that provide western yellow-billed cuckoo habitat typically exist in lower elevation, broad floodplains, as well as where rivers and streams enter impoundments. The species does not use narrow, steep-walled canyons. In the extreme southern portion of their range in the States of Sonora (southern quarter) and Sinaloa, Mexico, western yellow-billed cuckoos also nest in upland thorn scrub and dry deciduous habitats away from the riparian zone (Russell and Monson 1988, p. 131), though their densities are lower in these habitats than they are in adjacent riparian areas.



At the landscape level, the available information suggests the western yellow-billed cuckoo requires large tracts of willow-cottonwood or mesquite (*Prosopis* sp.) forest or woodland for their nesting season habitat. Western yellow-billed cuckoos rarely nest at sites less than 50 acres (ac) (20 hectares (ha)) in size, and sites less than 37 ac (15 ha) are considered unsuitable habitat (Laymon and Halterman 1989, p. 275). Habitat patches from 50 to 100 ac (20 to 40 ha) in size are considered marginal habitat (Laymon and Halterman 1989, p. 275). Habitat between 100 ac (40 ha) and 200 ac (81 ha), although considered suitable are not consistently used by the species. The optimal size of habitat patches for the species are generally greater than 200 ac (81 ha) in extent and have dense canopy closure and high foliage volume of willows (*Salix* sp.) and cottonwoods (*Populus* sp.) (Laymon and Halterman 1989, pp. 274–275) and thus provide adequate space for foraging and nesting. Tamarisk (*Tamarix* sp.), a nonnative tree species, may be a component of the habitat, especially in Arizona and New Mexico. As the proportion of tamarisk increases, the suitability of the habitat for the western yellow-billed cuckoo decreases. Sites with a monoculture of tamarisk are unsuitable habitat for the species. Sites with strips of habitat less than 325 ft (100 m) in width are rarely occupied, which indicates that edge effects in addition to overall patch size influence western yellow-billed cuckoo habitat selection for nesting. The association of breeding with large tracts of suitable riparian habitat is likely related to home range size. Individual home ranges during the breeding season average over 100 ac (40 ha), and home ranges up to 500 ac (202 ha) have been recorded (Laymon and Halterman 1987, pp. 31–32; Halterman 2009, p. 93; Sechrist *et al.* 2009, p. vii; McNeil *et al.* 2010, p. 75; McNeil *et al.* 2011, p. 37;

McNeil *et al.* 2012, p. 69).

Western yellow-billed cuckoos may nest at more than one location in a year. Some individuals may nest first in the northern area, such as Arizona or New Mexico, and then nest a second time at more southern locations in southern Sonora, Mexico (Rohwer *et al.* 2009, pp. 19050–19055). However, data are lacking to confirm that the same individuals are breeding in both locations within the same season. Some individuals also roam widely (several hundred miles), apparently assessing food resources prior to selecting a nest site (Sechrist *et al.* 2012, pp. 2–11).

During movements between nesting attempts western yellow-billed cuckoos are found at riparian sites with small groves or strips of trees, sometimes less than 10 ac (4 ha) in extent (Laymon and Halterman 1989, p. 274). These stopover and foraging sites can be similar to breeding sites, but are smaller in size, are narrower in width, and lack understory vegetation when compared to nesting sites.

Therefore, based on the information above, we identify rivers and streams of lower gradient and more open valleys with a broad floodplain to be an essential physical or biological feature for this species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Food

Western yellow-billed cuckoos are insect specialists but also prey on small vertebrates such as tree frogs and lizards. They depend on an abundance of large, nutritious insect prey (for example, sphinx moth larvae (Family Sphingidae) and katydids (Family Tettigoniidae)) and, in some cases, a high population density of tree frogs (e.g., *Hyla* sp. and *Pseudacris* sp.). In the arid West, these conditions are usually found in cottonwood-willow riparian associations along water courses. The arrival of birds and the timing of nesting are geared to take advantage of any short-term abundance of prey. In years of high insect abundance, western yellow-billed cuckoos lay larger clutches (three to five eggs rather than two), a larger percentage of eggs produce fledged young, and they breed multiple times (two to three nesting attempts rather than one) (Laymon *et al.* 1997, pp. 5–7). Diet studies of western yellow-billed cuckoos on the South Fork Kern River in California showed the majority of the prey to be large green caterpillars (primarily big poplar sphinx moth larvae (*Pachysphinx occidentalis*)) (45 percent), tree frogs (24 percent), katydids (22 percent), and grasshoppers (Suborder Caelifera) (9 percent) (Laymon *et al.* 1997, p. 7). Minor prey at that and other sites include beetles (*Coleoptera* sp.), dragonflies (*Odonata* sp.), praying mantis (*Mantidae* sp.), flies (*Diptera* sp.), spiders (*Araneae* sp.), butterflies (*Lepidoptera* sp.), caddis flies (*Trichoptera* sp.), crickets (*Gryllidae* sp.), and cicadas (Family Cicadidae) (Laymon *et al.* 1997, p. 7; Hughes 1999, pp. 7–8). In Arizona, cicadas are an important food source (Halterman 2009, p. 112). Small vertebrates such as lizards (*Lacertilia* sp.) are also eaten (Hughes 1999, p. 8).

Western yellow-billed cuckoo food availability is largely influenced by the health, density, and species of vegetation. For example, the big poplar sphinx moth larvae are found only in willows and cottonwoods and appear to reach their highest density in Fremont cottonwoods (Oehlke 2012, p. 4). Desiccated riparian sites produce fewer suitable insects than healthy moist sites. Western yellow-billed cuckoos generally forage within the tree canopy, and the higher the foliage volume the more likely yellow-billed cuckoos are to use a site for foraging (Laymon and Halterman 1985, pp. 10–12). They generally employ a “sit and wait” foraging strategy, watching the foliage for movement of potential prey (Hughes 1999, p. 7).

Therefore, based on the information above, we identify the presence of abundant, large insect fauna (for example, cicadas, caterpillars, katydids, grasshoppers, large beetles, and dragonflies) and tree frogs during nesting season to be an essential physical or biological feature for this species.

#### Water and Humidity

Habitat for western yellow-billed cuckoo is largely associated with perennial rivers and streams that support the expanse of vegetation characteristics needed by breeding western yellow-billed cuckoos. The range and variation of stream flow frequency, magnitude, duration, and timing that will establish and maintain western yellow-billed cuckoo habitat can occur in different types of regulated and unregulated flow conditions depending on the interaction of the water feature and the physical

characteristics of the landscape.

Hydrologic conditions at western yellow-billed cuckoo breeding sites can vary remarkably between years. At some locations during low rainfall years, water or saturated soil is not available. At other locations, particularly at reservoir intakes, riparian vegetation can be inundated for extended periods of time in some years and be totally dry in other years. This is particularly true of reservoirs like Lake Isabella in California, Roosevelt and Horseshoe Reservoirs in Arizona, and Elephant Butte Reservoir in New Mexico, all of which have relatively large western yellow-billed cuckoo populations. This year-to-year change in hydrology can affect food availability and habitat suitability for western yellow-billed cuckoos. Extended inundation reduces habitat suitability because larvae of sphinx moths pupate and eggs of katydids are laid underground, and prolonged flooding kills the larvae and eggs (Peterson *et al.* 2008), thus removing important food sources.

In some areas, managed hydrologic cycles above or below dams can create temporary western yellow-billed cuckoo habitat, but may not be able to support it for an extended amount of time, or may support varying amounts of habitat at different points of the cycle and in different years. Water management operations create varied situations that allow different plant species to thrive when water is released below a dam, held in a reservoir, or removed from a lakebed, and consequently, varying amounts of western yellow-billed cuckoo habitat are available from month to month and year to year as a result of dam operations. During wet years, habitat within a lake and below a dam can be

flooded for extended periods of time and vegetation can be stressed or killed. During dry years, vegetated habitat can be desiccated and stressed or killed because of lack of water.

Humid conditions created by surface and subsurface moisture appear to be important habitat parameters for western yellow-billed cuckoo. The species has been observed as being restricted to nesting in moist riparian habitat in the arid West because of humidity requirements for successful hatching and rearing of young (Hamilton and Hamilton 1965, pp. 427; Gaines and Laymon 1984, pp. 75–76; Rosenberg *et al.* 1991, pp. 203–204). Western yellow-billed cuckoos have evolved larger eggs and thicker eggshells, which would help them cope with potential higher egg water loss in the hotter, dryer conditions (Hamilton and Hamilton 1965, pp. 426–430; Ar *et al.* 1974, pp. 153–158; Rahn and Ar 1974, pp. 147–152). A study on the South Fork Kern River showed that lower temperatures and higher humidity were found at nest sites when compared to areas along the riparian forest edge or outside the forest (Launer *et al.* 1990, pp. 6–7, 23). Recent research on the lower Colorado River has confirmed that western yellow-billed cuckoo nest sites had significantly higher daytime relative humidity (6–13 percent higher) and significantly lower daytime temperatures (2–4 degrees Fahrenheit (1–2 degrees Celsius) lower) than average forested sites (McNeil *et al.* 2011, pp. 92–101; McNeil *et al.* 2012, pp. 75–83).

Subsurface hydrologic conditions are equally important to surface water conditions in determining riparian vegetation patterns. Depth to groundwater plays an important part in the distribution of riparian vegetation and western yellow-billed cuckoo

habitat. Where groundwater levels are elevated so riparian forest trees can access the water, habitat for nesting, foraging, and migrating western yellow-billed cuckoos can develop and thrive. Goodding's willows (*Salix gooddingii*) and Fremont cottonwoods (*Populus fremontii*) do not regenerate if the groundwater levels fall below 6 ft (2 m) (Shafroth *et al.* 2000, pp. 66–75). Goodding's willows cannot survive if groundwater levels drop below 10 ft (3 m), and Fremont cottonwoods cannot survive if groundwater drops below 16 ft (5 m) (Stromberg and Tiller 1996, pp. 123). Abundant and healthy riparian vegetation decreases and habitat becomes stressed and less productive when groundwater levels are lowered (Stromberg and Tiller. 1996, pp. 123–127).

Therefore, based on the information above, we identify flowing rivers and streams, elevated subsurface groundwater tables, and high humidity as essential physical and biological features of western yellow-billed cuckoo habitat.

#### Conditions for Germination and Regeneration of Riparian Zone Trees

The abundance and distribution of fine sediment deposited on floodplains is critical for the development, abundance, distribution, maintenance, and germination of trees in the riparian zone that become western yellow-billed cuckoo habitat. These sediments become seedbeds for germination and growth of the riparian vegetation upon which western yellow-billed cuckoos depend. These sediments must be accompanied by sufficient surface moisture for seed germination and sufficient ground water levels for survival of seedlings and saplings (Stromberg 2001, pp. 27–28). The lack of stream flow

processes, which deposit such sediments, may lead riparian forested areas to senesce and to become degraded and not able to support the varied vegetative structure required for western yellow-billed cuckoo nesting and foraging.

Therefore, based on the information above, we identify flowing perennial rivers and streams and deposited fine sediments as essential physical and biological features of western yellow-billed cuckoo habitat.

#### Cover or Shelter

Riparian vegetation also provides the western yellow-billed cuckoo with cover and shelter while foraging and nesting. Placing nests in dense vegetation provides cover and shelter from predators that would search for adult western yellow-billed cuckoos, their eggs, nestlings, and fledged young. Northern harriers (*Circus cyaneus*) have been observed preying on western yellow-billed cuckoo nestlings at open riparian restoration sites. Dense foliage precludes the entry of northern harriers into the habitat patch (Laymon 1998, pp. 12–14). Likewise, within the breeding range, western yellow-billed cuckoos also use riparian vegetation for cover and shelter as movement corridors between foraging sites and as post-breeding dispersal areas for adults and young. Movement corridors provide a place to rest and provide cover and shelter from predators during movement from one foraging area to another. These movement corridors within the breeding range, even though not used for nesting, are important resources affecting local and regional western yellow-billed cuckoo productivity and survival.



Therefore, based on the information above, we identify riparian trees including willow, cottonwood, alder (*Alnus* sp.), walnut (*Juglans* sp.), sycamore (*Platanus* sp.), boxelder (*Acer* sp.), ash (*Fraxinus* sp.), mesquite, and tamarisk that provide cover and shelter for foraging and dispersing western yellow-billed cuckoos as essential physical or biological features of western yellow-billed cuckoo habitat.

#### Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

The western yellow-billed cuckoo utilizes nesting sites in riparian habitat where conditions are cooler and more humid than in the surrounding environment. Riparian habitat characteristics, such as dominant tree species, size and shape of habitat patches, tree canopy structure, vegetation height, and vegetation density, are important parameters of western yellow-billed cuckoo breeding habitat. Throughout the range, most nests are placed in willows (72 percent of 217 nests), and willows generally dominate nesting sites. Willow species used for nest trees include Goodding's black willow, red willow (*Salix laevigata*), and coyote willow (*Salix exigua*) (Laymon 1998, p. 7; Hughes 1999, p. 13).

Nests have also been documented in other riparian trees, including Fremont cottonwood (13 percent), mesquite (7 percent), tamarisk (4 percent), netleaf hackberry (*Celtis laevigata* var. *reticulata*) (2 percent), English walnut (*Juglans regia*) (1 percent), box elder (less than 1 percent), and soapberry (*Sapindus saponaria*) (less than 1 percent). They have also nested in Arizona walnut (*Juglans major*), alder (*Alnus rhombifolia* and *A. oblongifolia*), and Arizona sycamore (*Platanus wrightii*) (Laymon 1980, p. 8; Laymon

1998, p. 7; Hughes 1999, p. 13; Corman and Magill 2000, p. 16; Launer *et al.* 2000, p. 22; Halterman 2001, p. 11; Halterman 2002, p. 12; Halterman 2003, p. 11; Halterman 2004, p. 13; Corman and Wise-Gervais 2005, p. 202; Halterman 2005, p. 10; Halterman 2007, p. 5; Holmes *et al.* 2008, p. 21). Five pairs of western yellow-billed cuckoos were found nesting along the Sacramento River in a poorly groomed English walnut orchard that provided numerous densely foliated horizontal branches on which western yellow-billed cuckoos prefer to build their nests (Laymon 1980, pp. 6–8). These orchard-nesting western yellow-billed cuckoos did not forage in the orchard, but flew across the river to forage in riparian habitat. Tamarisk is also a riparian species that may be associated with breeding under limited conditions; western yellow-billed cuckoo will sometimes build their nests and forage in tamarisk, but there is always a native riparian tree component within the occupied habitat (Gaines and Laymon 1984, p. 72; Johnson *et al.* 2008a, pp. 203–204). Johnson *et al.* (2008a, pp. 203–204) conducted Statewide surveys in Arizona of almost all historically occupied habitat of the western yellow-billed cuckoo in the late 1990s, and found 85 percent of all western yellow-billed cuckoo detections in habitat dominated by cottonwood with a strong willow and mesquite understory and only 5 percent within habitats dominated by tamarisk. Even in the tamarisk-dominated habitat, cottonwoods were still present at all but two of these sites.

Nest site characteristics have been compiled from 217 western yellow-billed cuckoo nests on the Sacramento and South Fork Kern Rivers in California, and the Bill Williams and San Pedro Rivers in Arizona. Western yellow-billed cuckoos generally nest in thickets dominated by willow trees. Nests are placed on well-foliated branches

closer to the tip of the branch than the trunk of the tree (Hughes 1999, p. 13). Nests are built from 4 ft to 73 ft (1 m to 22 m) above the ground and average 22 ft (7 m). Nests at the San Pedro River averaged higher (29 ft (9 m)) than either the Bill Williams River (21 ft (6 m)) or the South Fork Kern River (16 ft (5 m)). Nest trees ranged from 10 ft (3 m) to 98 ft (30 m) in height and averaged 35 ft (11 m). In older stands, heavily foliated branches that are suitable for nesting often grow out into small forest openings or over sloughs or streams, making for ideal nest sites. In younger stands, nests are more often placed in vertical forks or tree crotches. Canopy cover directly above the nest is generally dense and averages 89 percent and is denser at the South Fork Kern River (93 percent) and Bill Williams River (94 percent) than at the San Pedro River (82 percent). Canopy closure in a plot around the nest averages 71 percent and was higher at the Bill Williams River (80 percent) than at the South Fork Kern River (74 percent) or San Pedro River (64 percent) (Laymon *et al.* 1997, pp. 22–23; Halterman 2001, pp. 28–29; Halterman 2002, p. 25; Halterman 2003, p. 27; Halterman 2004, p. 42; Halterman 2005, p. 32; Halterman 2006, p. 34).

In addition to the dense, generally willow-dominated nesting grove, western yellow-billed cuckoos need adequate foraging areas in the vicinity of the nest. Foraging areas can be less dense with lower levels of canopy cover and often have a high proportion of cottonwoods in the canopy. Optimal breeding habitat contains willow-dominated groves with dense canopy closure and well-foliated branches for nest building with nearby foraging areas consisting of a mixture of cottonwoods and willows with a high volume of healthy foliage.

As discussed above, the habitat patches used by western yellow-billed cuckoos vary in size and shape with optimal areal extent being over 200 ac (81 ha) in size (see Space for Individual and Population Growth for Normal Behavior). The larger the site, the more likely it will provide suitable habitat for the western yellow-billed cuckoos and be occupied by nesting pairs (Laymon and Halterman 1989, pp. 274–275). Sites can be relatively dense, contiguous stands or irregularly shaped mosaics of dense vegetation with open areas.

Western yellow-billed cuckoos typically have large home ranges during the breeding season, averaging more than 100 ac (40 ha) per individual, and nest at low densities of less than 1 pair per 100 ac (40 ha) (Laymon *et al.* 1997, p. 19; Laymon and Williams 2002, p. 5; Halterman 2009, p. 93; Sechrist *et al.* 2009, p. vii; McNeil *et al.* 2010, p. 75; McNeil *et al.* 2011, p. 37; McNeil *et al.* 2012, p. 69). As a result, a large amount of habitat is required to support even a small population of western yellow-billed cuckoos.

Therefore, based on the information above, we identify blocks of riparian habitat greater than 200 ac (81 ha) in extent and greater than 325 ft (100 m) in width, with one or more densely foliated, willow-dominated nesting sites and cottonwood-dominated foraging sites, to be a physical or biological feature for the species' habitat.

Habitats Protected from Disturbance or Representative of the Historical, Geographical,

## and Ecological Distributions of the Species

The occupied rivers and streams that are proposed for designation contain physical and biological features that are representative of the historic and geographical distribution of the species.

### **Primary Constituent Elements for the Western Yellow-billed Cuckoo**

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the western yellow-billed cuckoo in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes including breeding, foraging and dispersing, we determine that the primary constituent elements specific to the western yellow-billed cuckoo are:

(1) Primary Constituent Element 1—*Riparian woodlands*. Riparian woodlands with mixed willow-cottonwood vegetation, mesquite-thorn-forest vegetation, or a combination of these that contain habitat for nesting and foraging in contiguous or nearly

contiguous patches that are greater than 325 ft (100 m) in width and 200 ac (81 ha) or more in extent. These habitat patches contain one or more nesting groves, which are generally willow-dominated, have above average canopy closure (greater than 70 percent), and have a cooler, more humid environment than the surrounding riparian and upland habitats.

(2) Primary Constituent Element 2—*Adequate prey base*. Presence of a prey base consisting of large insect fauna (for example, cicadas, caterpillars, katydids, grasshoppers, large beetles, dragonflies) and tree frogs for adults and young in breeding areas during the nesting season and in post-breeding dispersal areas.

(3) Primary Constituent Element 3—*Dynamic riverine processes*. River systems that are dynamic and provide hydrologic processes that encourage sediment movement and deposits that allow seedling germination and promote plant growth, maintenance, health, and vigor (e.g. lower gradient streams and broad floodplains, elevated subsurface groundwater table, and perennial rivers and streams). This allows habitat to regenerate at regular intervals, leading to riparian vegetation with variously aged patches from young to old.

Because the species exists in disjunct breeding populations across a wide geographical and elevational range and is subject to dynamic events, the river segments described below are essential to the conservation of the western yellow-billed cuckoo, because they maintain stability of subpopulations, provide connectivity between

populations and habitat, assist in gene flow, and protect against catastrophic loss. The occupied rivers and streams that are proposed for designation contain physical and biological features that are representative of the historic and geographical distribution of the species. All river segments proposed as western yellow-billed cuckoo critical habitat are within the geographical area occupied by the species as defined by the species' DPS at the time of listing (i.e., currently) and contain the features essential to the conservation of the species. The features essential to the conservation of the species and refined primary constituent elements are present throughout the river segments selected, but the specific quality of riparian habitat for nesting, migration, and foraging will vary in condition and location over time due to plant succession and the dynamic environment in which they exist.

#### *Special Management Considerations or Protection*

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection.

We believe the areas proposed to be designated as critical habitat will require some level of management or protection or both to address the current and future threats to the western yellow-billed cuckoo and maintain the physical or biological features essential to the conservation of the species. Areas in need of management include not

only currently suitable locations where the species may be present, but also areas that may become suitable in the future. The critical habitat sites that we are proposing are all occupied, but may include both currently suitable habitat and adjacent habitat that will become suitable in the near future.

The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in the conservation of the western yellow-billed cuckoo. The western yellow-billed cuckoo may also be dependent upon factors beyond the critical habitat boundaries that are important in maintaining ecological processes such as hydrology; streamflow; hydrological regimes; plant germination, growth, maintenance, and regeneration; sedimentation; ground water elevations; plant health and vigor; or support of prey populations. Individual or small populations of western yellow-billed cuckoos may nest in habitat outside of the proposed critical habitat units.

A detailed discussion of threats to the western yellow-billed cuckoo and its habitat can be found in the **Summary of the Factors Affecting the Species** section of the proposed listing rule for the species published in the **Federal Register** on October 3, 2013 (78 FR 61621). The features essential to the conservation of this species and the activities which may require special management considerations or protection are summarized below:

*Threat:* Disruption of hydrological processes that are necessary to maintain a healthy riparian system.



*Management Considerations:* Hydrological elements and processes can be managed to benefit riparian systems. Streamflows can be restored by managing dams to mimic the natural hydrology to the greatest extent possible, and to support the health and regeneration of native riparian shrub and tree vegetation. Reservoirs can be managed to reduce prolonged flooding of riparian habitat in the flood control drawdown zone, which kills or damages native riparian vegetation. Restoration of natural hydrological regimes or management of systems so that they mimic natural regimes that favor germination and growth of native plant species are important. Improving timing of water drawdown in reservoirs to coincide with the seed dispersal and germination of native species can be effective in restoring native riparian vegetation. Reducing water diversions and ground water pumping that degrade riparian systems can benefit the western yellow-billed cuckoo and its habitat. Reduction of bank stabilization features, including rip-rap, levees, or other structures, that limit natural fluvial processes can promote maturation of the native riparian vegetation and prevent regular habitat regeneration. Clearing channels for flood flow conveyance or plowing of floodplains can be avoided. Projects can be managed to minimize clearing of native vegetation to help ensure that desired native species persist.

*Threat:* Loss of riparian habitat regeneration caused by poorly managed grazing.

*Management Considerations:* Biotic elements and processes can be managed to benefit riparian systems. Managed grazing areas, season, and use in riparian zones can increase western yellow-billed cuckoo habitat quality and quantity. Specifically,

managing grazing so that native riparian trees and shrubs will regenerate on a regular basis is especially beneficial.

*Threat:* Loss of riparian habitat from development activities and extractive uses.

*Management Considerations:* Limiting extractive uses, such as gravel mining and woodcutting, in the vicinity of western yellow-billed cuckoo habitat is an important management tool. Clearing of riparian habitat for agriculture, industrial and residential development, and road building and maintenance is detrimental to the species and should be moved from the floodplain management zone to the greatest extent possible.

*Threat:* Degradation of riparian habitat as a result of expansion of nonnative vegetation.

*Management Considerations:* Removal of nonnative vegetation in areas where natural regeneration of native riparian species may be a valuable management tool. On some sites, replacement of nonnative vegetation with native riparian tree species through active restoration plantings can speed up the habitat recovery process and more quickly benefit the western yellow-billed cuckoo.

*Threat:* Destruction of riparian habitat by uncontrolled wildfire.

*Management Considerations:* Fire can be managed to maintain and enhance habitat quality and quantity. Fires in the riparian zone can be suppressed and the risk of wildlife fire can be reduced by restoring ground water, base flows, flooding, and natural hydrological regimes. Reduction of fires caused by recreational activities and the

reduction of fuel buildup and prevention of introduction of flammable exotic species can also be beneficial.

*Threat:* Reduction of prey insect abundance by the application of pesticides.

*Management Considerations:* Avoiding application of pesticides that would limit the abundance of large insects and their larva on or in the vicinity of riparian areas at any time of year would help to maintain an adequate prey base for the western yellow-billed cuckoo.

These management activities would protect and enhance the physical or biological features for the western yellow-billed cuckoo by reducing or eliminating the above threats. Management activities that could benefit the species are not limited to those listed above. Furthermore, management of critical habitat would help provide additional and improved habitat that would give the species the best possible chance of recovery.

#### *Criteria Used To Identify Critical Habitat*

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and its implementing regulation at 50 CFR 424.12(b), we reviewed the available information pertaining to the habitat requirements of the species and identified occupied areas at the time of listing that contain the features essential to the conservation of the species. If after identifying currently occupied areas, a determination is made that those areas are inadequate to

ensure conservation of the species, in accordance with the Act and our implementing regulations at 50 CFR 424.12(e), we considered whether designating additional areas—outside those currently occupied—is essential for the conservation of the species. We are defining the geographical area (*i.e.*, range) occupied at the time of listing as the geographical area that encompasses the breeding range of the western yellow-billed cuckoo based on breeding records between 1998 and 2012. This timeframe was chosen because the last Statewide western yellow-billed cuckoo surveys in Arizona were conducted in 1998 to 1999, and the last Statewide western yellow-billed cuckoos surveys in California were in 1999 to 2000. The majority of the sites have not been surveyed since the 1998 to 2000 time period, though key sites such as the Sacramento, Verde, Colorado, San Juan, and Rio Grande Rivers and several other smaller sites have been surveyed more recently. The 1998 to 2012 time period represents the best scientific data available.

We are not currently proposing to designate any specific areas outside the geographical area occupied by the species because the areas proposed for designation encompass the vast majority of areas where the species currently regularly occurs and nests. However, we are including within the proposed units habitats that are intermittently used by the species as areas for movement, dispersal, foraging, or connectivity. We have determined that limiting the designation of critical habitat to confirmed breeding sites within the units is insufficient to conserve and recover the species because: (1) Some breeding habitat that is not currently suitable will become suitable in the future; (2) the species needs habitat areas that are arranged spatially to

maintain connectivity and allow dispersal within and between units; and (3) food resources change both within and between years, and additional habitat is needed to accommodate this change. We have not included critical habitat units within Oregon or Washington because the species has been extirpated as a breeder from those States for the past 90 years, and recent observations of the species have not coincided with suitable habitat and appear to be migrants. The habitat farther south in California that is currently occupied at very low densities and is being proposed as critical habitat is sufficient to address the far-western part of the species' range for recovery of the species. Should we receive information during the public comment period that supports designating as critical habitat areas not included in the proposed units (see **Proposed Critical Habitat Designation** section below), we will reevaluate our current proposal.

We employed the following criteria to select appropriate areas for this proposed designation. These criteria are based on well-accepted conservation biology principles for conserving species and their habitats, such as those described by Meffe and Carroll (1997, pp. 347–383); Shaffer and Stein (2000, pp. 301–321); and Tear *et al.* (2005, pp. 835–849).

(1) *Representation.* Areas were chosen to represent the varying habitat types across the species' range. Habitats in the arid Southwest differ significantly from those in northern California. Additional areas are included if they are considered a unique habitat or climate, or they are situated to facilitate interchange between otherwise widely separated units. By protecting a variety of habitats and facilitating interchange between

them, we increase the ability of the species to adjust to various limiting factors that affect the population, such as habitat loss and degradation or climate change.

(2) *Resiliency and redundancy.* Areas were selected throughout the range of the western yellow-billed cuckoo to allow the species to move and expand. By identifying a number of areas of appropriate size throughout the species' range at the time of listing, we provide the western yellow-billed cuckoo opportunities to move to adjust for changes in habitat availability, food sources, and pressures on survivorship or reproductive success. Designating units in appropriate areas throughout the range of the western yellow-billed cuckoo allows for seasonal migration and year-to-year movements. We consider this necessary to conserve the species because it assists in counterbalancing continued habitat loss and degradation, and complements the dynamic nature of riparian systems. Having units across the species' range helps maintain a robust, well-distributed population and enhances survival and productivity of the western yellow-billed cuckoo as a whole, facilitates interchange of individuals between units, and promotes recolonization of any sites within the current range that experience declines or local extirpations due to low productivity or temporary habitat loss.

(3) *Breeding areas.* These areas were selected because they contain the physical and biological features necessary for western yellow-billed cuckoos to breed and produce offspring and are essential to the conservation of the species. Selected sites include areas currently being used by breeding western yellow-billed cuckoos. By selecting breeding areas across the western yellow-billed cuckoo's range, we can assist in conserving the

species' genetic variability for long-term sustainability of the species.

(4) *Areas to maintain connectivity of habitat.* While all units contain all of the essential physical or biological features, some portions of some units may lack certain elements or contain marginal habitat. These areas are included within a unit if they are needed for connectivity, have potential to become suitable habitat, or contribute to the hydrologic and geologic processes essential to the ecological function of the system. These areas are essential to the conservation of the species because they maintain connectivity within populations, allow for species movement throughout the course of a given year, allow for population expansion into areas that were historically occupied, and allow for species movement as a result of potential habitat changes due to the dynamic nature of riparian systems and to climate change.

(5) *Areas that provide for variable food resources or habitat.* Yellow-billed cuckoos are a migrant species keenly adapted to take advantage of localized food resource outbreaks or habitat availability. We include areas within the proposed designated units not currently being used as breeding sites to provide spatial and temporal changes in food abundance.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas, such as lands covered by buildings, pavement, and other structures, because such lands lack physical or biological features for the western yellow-billed cuckoo. The scale of the maps we prepared under the parameters for publication

within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger consultation under section 7 of the Act with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in adjacent critical habitat.

We are proposing to designate as critical habitat lands within the geographical area occupied by the western yellow-billed cuckoo at the time of listing and that contain the physical or biological features necessary to support life-history processes essential to the conservation of the western yellow-billed cuckoo. These areas have sufficient primary constituent elements (PCEs) (described above) to enable the western yellow-billed cuckoo to carry out its essential life processes.

Compared to conditions historically, the areas currently used for nesting by the western yellow-billed cuckoo are very limited and disjunct. The breeding population is small, with 680 to 1,025 nesting pairs (350 to 495 pairs in the United States and 330 to 530 nesting pairs in Mexico), and with no site exceeding 60 nesting pairs. Estimating numbers is problematic because an individual can nest in more than one location in a single year, possibly causing overestimates of the number of nesting pairs. The western yellow-billed cuckoo is susceptible to random events such as major storms during



migration or prolonged drought, and is likely to be reduced in numbers in the future according to current information on population trends. As such, all known nesting areas are occupied at the time of listing and contain the PCEs. We are proposing to designate as critical habitat all known nesting areas greater than 200 ac (81 ha) in extent in the area occupied by the western yellow-billed cuckoo for nesting north of the border with Mexico and south of the border with Canada. Sites that contain less than 200 ac (81 ha) of riparian habitat are not included. These small, isolated sites with sufficient habitat for only one or two pairs of western yellow-billed cuckoos are not essential to the survival and recovery of the species.

The amount and distribution of critical habitat we are proposing will allow populations of western yellow-billed cuckoo the opportunity to: (1) Maintain their existing distribution; (2) move between areas depending on food, resource, and habitat availability; (3) increase the size of the population to a level where the threats of genetic, demographic, and normal environmental uncertainties are diminished; and (4) maintain their ability to withstand local- or unit-level environmental fluctuations or catastrophes.

#### Selecting Critical Habitat Sites Within the Range Occupied by Western Yellow-billed Cuckoo at the Time of Listing

We define proposed critical habitat as sites that contains the physical or biological features essential to the conservation of the species within the geographical area occupied by the species (range) at the time of listing. These features include riparian habitat for

foraging with additional areas (one or more groves) of closed canopy mesic (moist) habitat for nesting (200 ac (81 ha) minimum total). The critical habitat units selected were either occupied by mated pairs of western yellow-billed cuckoo in at least one year between 1998 and 2012 or were occupied by individual western yellow-billed cuckoos of unknown mating status during the breeding season (late June, July, mid-August) in at least 2 years between 1998 and 2012. For purposes of this document, nesting pairs were determined based on factors including actual nests located, pairs exhibiting nesting activity, and single western yellow-billed cuckoos in suitable habitat during the breeding season. Sites that currently contain less than 200 ac (81 ha) of riparian habitat were not selected. These small, isolated sites less than 200 ac (81 ha) with sufficient habitat for only one or two pairs of western yellow-billed cuckoos tend to be occupied sporadically and are not considered essential to the conservation and recovery of the species.

To delineate the proposed units of critical habitat, we plotted on maps all breeding season occurrences of the western yellow-billed between 1998 and 2012. We used reports prepared by the U.S. Geological Survey (USGS), U.S. Forest Service (USFS), National Park Service (NPS), Bureau of Land Management (BLM), Bureau of Reclamation (Reclamation), the Salt River Project, State wildlife agencies, State natural diversity data bases, researchers, nongovernment organizations, universities, and consultants, as well as available information in our files, to determine the location of specific breeding areas within the geographical area occupied by the western yellow-billed cuckoo at the time of listing. We then delineated riparian habitat around that location, as well as riparian habitat upstream and downstream from the occurrence

location, until a break in the riparian habitat of 0.25 miles (mi) (0.62 kilometers (km)) or more was reached. Western yellow-billed cuckoos rarely traverse distances across unwooded spaces greater than 0.25 mi (0.62 km) in their daily foraging activities. Sites where migrant western yellow-billed cuckoos were found, but where there is less than 100 ac (40 ha) of riparian habitat with no suitable nesting sites and suitable habitat is unlikely to develop in the future, are not proposed as critical habitat (for example, Southeast Farallon Islands or Furnace Creek Ranch in Death Valley).

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document in the **Proposed Regulation Promulgation** section. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on the Internet at <http://www.regulations.gov> at Docket No. FWS–R8–ES–2013–0011, and at the Sacramento Fish and Wildlife Office at <http://www.fws.gov/sacramento> (see **FOR FURTHER INFORMATION CONTACT**, above).

### **Proposed Critical Habitat Designation**

We are proposing 80 units as critical habitat for western yellow-billed cuckoo. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for western yellow-billed cuckoo. All of the units located within the geographical area occupied at the time of listing contain all of

the identified elements of physical or biological features and support multiple life-history processes. The approximate area of each proposed critical habitat unit and ownership information is shown in Table 1.

Table 1. Proposed critical habitat units for western yellow-billed cuckoo.

Area estimates reflect all land within critical habitat unit boundaries.

Critical Habitat Unit	Name of Unit	Size of Unit in Ac (Ha)	Federal	State	Tribal	Other
1	CA-1 Eel River	4,909 (1,987)	0 (0)	0 (0)	0 (0)	4,909 (1,987)
2	CA-2 Sacramento River	35,418 (14,333)	10,203 (4,129)	6,375 (2,580)	14 (6)	18,827 (7,619)
3	CA-3 Sutter Bypass	1,090 (441)	566 (229)	0 (0)	0 (0)	524 (212)
4	CA-4 South Fork Kern River Valley	2,862 (1,158)	1,218 (493)	0 (0)	0 (0)	1,644 (665)
5	CA-5 Owens River	1,598 (647)	1(<1)	0 (0)	0 (0)	1,597 (647)
6	CA-6 Prado Flood Control Basin	4,406 (1,784)	1,300 (526)	0 (0)	0 (0)	3,106 (1,257)
7	CA/AZ-1 Colorado River 1	78,961 (31,954)	32,576 (13,183)	4,187 (1,695)	22,485 (9,099)	19,713 (7,978)
8	CA/AZ-2 Colorado River 2	23,452 (9,491)	15,189 (6,147)	1 (<1)	4,730 (1,914)	3,532 (1,429)
9	AZ-1 Bill Williams River	3,390 (1,372)	2,640 (1,068)	0 (0)	0 (0)	750 (304)
10	AZ-2 Alamo Lake	2,794 (1,131)	1,840 (745)	0 (0)	0 (0)	954 (386)
11	AZ-3 Lake Mead	6,734 (2,725)	6,734 (2,725)	0 (0)	0 (0)	0 (0)
12	AZ-4 Lower Gila River	12,047 (4,875)	7,413 (3,000)	1,086 (440)	0 (0)	3,548 (1,436)
13	AZ-5 Upper Santa Maria River	1,636 (662)	573 (232)	336 (136)	0 (0)	727 (294)
14	AZ-6 Hassayampa River	2,838 (1,148)	591 (239)	10 (4)	0 (0)	2,237 (905)
15	AZ-7 Gila and Salt Rivers	17,585 (7,116)	4,719 (1,910)	2,642 (1,069)	868 (351)	9,356 (3,786)
16	AZ-8 Agua Fria River	3,337 (1,350)	1,802 (729)	235 (95)	0 (0)	1,300 (526)
17	AZ-9 Upper Verde River	4,531 (1,834)	2,217 (897)	776 (314)	0 (0)	1,538 (622)

18	AZ-10 Oak Creek	1,323 (535)	433 (175)	160 (65)	0 (0)	730 (295)
19	AZ-11 Beaver Creek and tributaries	2,082 (842)	1,491 (603)	0 (0)	3 (1)	588 (238)
20	AZ-12 Lower Verde River and West Clear Creek	2,053 (831)	447 (181)	31 (13)	43 (17)	1,532 (620)
21	AZ-13 Horseshoe Dam	626 (253)	626 (253)	0 (0)	0 (0)	0 (0)
22	AZ-14 Tonto Creek	3,670 (1,485)	2,529 (1,023)	0 (0)	0 (0)	1,141 (462)
23	AZ-15 Pinal Creek	419 (170)	30 (12)	0 (0)	0 (0)	389 (157)
24	AZ-16 Bonita Creek	929 (376)	828 (335)	0 (0)	0 (0)	101 (41)
25	AZ-17 San Francisco River 1	1,327 (537)	1,192 (482)	0 (0)	0 (0)	135 (55)
26	AZ-18 Upper San Pedro River	21,786 (8,816)	11,349 (4,593)	1,292 (523)	0 (0)	9,145 (3,701)
27	AZ-19 Hooker Hot Springs	375 (152)	163 (66)	4 (2)	0 (0)	208 (84)
28	AZ-20 Lower San Pedro and Gila Rivers	23,399 (9,469)	2,957 (1,197)	2,282 (923)	729 (295)	17,431 (7,054)
29	AZ-21 Picacho Reservoir	2,789 (1,129)	335 (136)	941 (381)	0 (0)	1,513 (612)
30	AZ-22 Peritas Wash	894 (362)	170 (69)	724 (293)	0 (0)	0 (0)
31	AZ-23 Arivaca Wash and San Luis Wash	5,765 (2,333)	4,662 (1,887)	89 (36)	0 (0)	1,014 (410)
32	AZ-24 Sonoita Creek	1,610 (652)	0 (0)	775 (314)	0 (0)	835 (338)
33	AZ-25 Upper Cienega Creek	5,204 (2,106)	4,630 (1,874)	574 (232)	0 (0)	0 (0)
34	AZ-26 Santa Cruz River	3,689 (1,493)	0 (0)	0 (0)	0 (0)	3,689 (1,493)
35	AZ-27 Black Draw	890 (360)	405 (164)	45 (18)	0 (0)	440 (178)
36	AZ-28 Gila River 1	20,726 (8,388)	780 (316)	216 (87)	10,183 (4,121)	9,547 (3,864)
37	AZ-29 Salt River	2,590 (1,048)	2,469 (999)	0 (0)	0 (0)	121 (49)
38	AZ-30 Lower Cienega Creek	2,360 (955)	0 (0)	759 (307)	0 (0)	1,601 (648)
39	AZ-31 Blue River	1,025 (415)	1,025 (415)	0 (0)	0 (0)	0 (0)
40	AZ-32 Pinto Creek South	373 (151)	368 (149)	0 (0)	0 (0)	5 (2)
41	AZ-33 Aravaipa Creek	1,209 (489)	470 (190)	1 (<1)	0 (0)	738 (299)
42	AZ-34 Lower Verde	1,079	1,063	0 (0)	0 (0)	16 (6)

	River	(437)	(430)			
43	AZ-35 Gila River 3	2,194 (888)	1,126 (456)	1 (<1)	0 (0)	1,067 (432)
44	AZ-36 Pinto Creek North	427 (173)	415 (168)	0 (0)	0 (0)	12 (5)
45	AZ-37 Florida Wash	188 (76)	113 (46)	32 (13)	0 (0)	43 (17)
46	NM-1 San Juan River 1	6,354 (2,571)	680 (275)	177 (72)	1,041 (421)	4,456 (1,804)
47	NM-3 San Francisco River 2	2,039 (825)	738 (299)	10 (4)	0 (0)	1,291 (522)
48	NM-4 Gila River 2	4,179 (1,691)	975 (395)	201 (81)	0 (0)	3,003 (1,216)
49	NM-5 Mimbres River	260 (105)	0 (0)	0 (0)	0 (0)	260 (105)
50	NM-6 Upper Rio Grande 1	1,830 (741)	0 (0)	0 (0)	1,313 (532)	517 (209)
51	NM-7 Middle Rio Grande 2	1,173 (475)	0 (0)	0 (0)	1,173 (475)	0 (0)
52	NM-8 Middle Rio Grande 1	61,959 (25,074)	19,559 (7,915)	938 (380)	9,509 (3,848)	31,953 (12,931)
53	NM-9 Upper Gila River	4,614 (1,867)	984 (398)	423 (171)	0 (0)	3,207 (1,298)
54	CO-1 Yampa River	6,938 (2,808)	0 (0)	1,199 (485)	0 (0)	5,739 (2,322)
55	CO-2 Colorado River 3	4,002 (1,620)	31 (13)	418 (169)	0 (0)	3,553 (1,438)
56	CO-3 North Fork Gunnison River	2,326 (941)	115 (47)	0 (0)	0 (0)	2,211 (895)
57	CO-4 Uncompahgre River	4,506 (1,824)	2 (1)	7 (3)	0 (0)	4,497 (1,820)
58	CO-5 Gunnison River	937 (379)	16 (6)	0 (0)	0 (0)	921 (373)
59	CO-6 Rio Grande 3	9,765 (3,952)	14 (6)	0 (0)	0 (0)	9,751 (3,946)
60	CO-7 Conejos River	8,986 (3,637)	330 (134)	47 (19)	0 (0)	8,609 (3,484)
61	UT-1 Green River 1	17,256 (6,983)	4,701 (1,902)	4,411 (1,786)	6,848 (2,772)	1,296 (524)
62	UT-2 Pigeon Water Creek and Lake Fork River	3,041 (1,231)	0 (0)	0 (0)	1,340 (543)	1,701 (688)
63	UT-3 Colorado River 4	579 (234)	209 (85)	238 (96)	0 (0)	132 (53)
64	UT-4 Dolores River	401 (162)	115 (47)	150 (61)	0 (0)	136 (55)
65	UT-5 Green River 2	4,657 (1,885)	4,657 (1,885)	0 (0)	0 (0)	0 (0)
66	UT-6 San Juan River 2	2,198 (889)	2,198 (889)	0 (0)	0 (0)	0 (0)

67	UT-7 San Juan River 3	9,692 (3,922)	1,589 (643)	38 (15)	7,766 (3,144)	299 (121)
68	UT-8 Virgin River 2	1,390 (562)	32 (13)	6 (2)	0 (0)	1,352 (547)
69	ID-1 Snake River 1	9,294 (3,761)	3,692 (1,494)	2 (1)	2,257 (913)	3,343 (1,353)
70	ID-2 Snake River 2	11,439 (4,629)	5,861 (2,372)	106 (43)	0 (0)	5,472 (2,214)
71	ID-3 Big Wood River	1,129 (457)	88 (36)	85 (34)	0 (0)	956 (387)
72	ID-4 Henry's Fork and Teton Rivers	3,449 (1,396)	396 (160)	341 (138)	0 (0)	2,712 (1,098)
73	NV-1 Upper Muddy River	1,472 (596)	1,315 (532)	0 (0)	0 (0)	157 (64)
74	NV-3 Lower Muddy River	437 (177)	0 (0)	0 (0)	0 (0)	437 (177)
75	NV-4 Carson River	4,348 (1,760)	1,149 (465)	13 (5)	0 (0)	3,186 (1,289)
76	NV/AZ-1 Virgin River 1	11,266 (4,559)	7,137 (2,888)	52 (21)	0 (0)	4,077 (1,650)
77	WY-1 Green River 3	7,471 (3,023)	5,705 (2,309)	629 (255)	0 (0)	1,137 (460)
78	WY/UT-1 Henry's Fork of Green River	9,306 (3,760)	144 (58)	228 (92)	0 (0)	8,934 (3,615)
79	TX-1 Arroyo Caballo, Rio Grande	1,261 (510)	0 (0)	0 (0)	0 (0)	1,261 (510)
80	TX-2 Terlingua Creek and Rio Grande	7,792 (3,153)	7,792 (3,153)	0 (0)	0 (0)	0 (0)
Total		546,335 (221,094)	199,882 (80,882)	33,293 (13,473)	70,302 (28,450)	242,859 (98,282)

Note: Area sizes may not sum due to rounding.

### *Unit Descriptions*

All units are within the geographical area occupied by the species at the time of listing. All units include the following physical or biological features essential to the conservation of the western yellow-billed cuckoo: (1) rivers and streams of low gradient with a broad floodplain; (2) flowing rivers and streams, elevated subsurface groundwater tables, and high humidity; (3) rivers and streams that allow functioning ecological processes and support riparian habitat regeneration (such as deposited fine sediments for

riparian seed germination); (4) areas of riparian woodlands with mixed willow-cottonwood at least 200 ac (80 ha) in extent and 325 ft (100 m) in width with one or more densely foliated nesting groves; and (5) an abundant large insect fauna during the nesting season. We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for the western yellow-billed cuckoo, below.

Special management considerations or protection may be required to conserve the physical or biological features essential to the conservation of the species within each unit. These special management considerations include actions to address the main threats from alteration of hydrology from (A) dams, (B) surface water diversions, (C) ground water diversions, and (D) fluctuating reservoir levels. Encroachment into the floodplain may also need special management considerations and can come from (E) agricultural and (F) other development activities, (G) bank stabilization and (H) levee construction and maintenance activities, (I) road and bridge maintenance activities, and (J) gravel mining. Other threats that may need special management considerations include (K) habitat degradation associated with poorly managed livestock grazing (generally identified as “overgrazing”), (L) pesticide drift from adjacent agricultural activities, (M) wood-cutting, and (N) recreation in the form of off-highway vehicle use within the riparian zone. To ensure the continued suitability of the unit, it may be necessary to implement special management considerations including: (O) Manage the hydrology to mimic natural riverflows and floodplain process, (P) prevent encroachment into the floodplain, and (Q) control expansion of and habitat degradation caused by nonnative vegetation. These threats and special management considerations are



summarized in Table 2.

Table 2. Threats to habitat and potential special management considerations. See end of table for definition of codes.

Critical Habitat Unit	Name of Unit	Threats from Alteration of Hydrology	Threats from Floodplain Encroachment	Other Threats	Special Management
1	CA-1 Eel River	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P
2	CA-2 Sacramento River	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
3	CA-3 Sutter Bypass	B, C	E, F, G, H	K, L, N	O, P, Q
4	CA-4 South Fork Kern River Valley	A, B, C, D	E, F, G, H, I	K, L, M, N	O, P, Q
5	CA-5 Owens River	A, B, C	E, F, G, H, I	K, L, M, N	O, P, Q
6	CA-6 Prado Flood Control Basin	A, D	F, I	N	P, Q
7	CA/AZ-1 Colorado River 1	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
8	CA/AZ-2 Colorado River 2	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
9	AZ-1 Bill Williams River	A, B, C		K, M, N	O, Q
10	AZ-2 Alamo Lake	B, C, D	F	K, M, N	O, P, Q
11	AZ-3 Lake Mead	B, C, D		K, M, N	O, P, Q
12	AZ-4 Lower Gila River	A, B, C	E, F, G, H, I	K, L, M	O, P, Q
13	AZ-5 Upper Santa Maria River	B, C	F, I	K, M	O, P, Q
14	AZ-6 Hassayampa River	B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
15	AZ-7 Gila and Salt Rivers	A, B, C	E, F, G, H, I, J	L, M, N	O, P, Q
16	AZ-8 Agua Fria River	A, B, C	F, G, I	K, L, M, N	O, P, Q
17	AZ-9 Upper Verde River	B, C	F, G, I	K, M, N	O, P, Q
18	AZ-10 Oak Creek	B, C	F, G, I	K, M, N	O, P, Q
19	AZ-11 Beaver Creek and tributaries	B, C	F, G, I	K, M, N	O, P, Q
20	AZ-12 Lower Verde River and West Clear	A, B, C	F, G, I	K, M, N	O, P, Q

	Creek				
21	AZ-13 Horseshoe Dam	B, C, D		K, M, N	O, P, Q
22	AZ-14 Tonto Creek	B, C, D	F, G, I	K, M, N	O, P, Q
23	AZ-15 Pinal Creek	B, C	F, G, I, J	K, L, M, N	O, P, Q
24	AZ-16 Bonita Creek	B, C	F, I	K, M, N	O, P, Q
25	AZ-17 San Francisco River 1	B, C	F, I	K, M, N	O, P, Q
26	AZ-18 Upper San Pedro River	B, C	E, F, G, I	K, L, M, N	O, P, Q
27	AZ-19 Hooker Hot Springs	B, C	F	K, M, N	O, P, Q
28	AZ-20 Lower San Pedro and Gila Rivers	A, B, C	E, F, G, H, I	K, L, M, N	O, P, Q
29	AZ-21 Picacho Reservoir	B, C, D	F	K, N	O, P, Q
30	AZ-22 Peritas Wash	B, C	F	K, M, N	O, P, Q
31	AZ-23 Arivaca Wash and San Luis Wash	B, C	F, I	K, M, N	O, P, Q
32	AZ-24 Sonoita Creek	B, C, D	F, G, I	K, M, N	O, P, Q
33	AZ-25 Upper Cienega Creek	B, C	F	K, M, N	O, P, Q
34	AZ-26 Santa Cruz River	B, C	E, F, G, H, I	K, L, M, N	O, P, Q
35	AZ-27 Black Draw	B, C	F	K, M, N	O, P, Q
36	AZ-28 Gila River 1	B, C	E, F, G, H	K, L, M, N	O, P, Q
37	AZ-29 Salt River	B, C, D	F, G, I	K, M, N	O, P, Q
38	AZ-30 Lower Cienega Creek	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
39	AZ-31 Blue River	A, B, C	G, I, J	K, M, N	O, P, Q
40	AZ-32 Pinto Creek South	A, B, C	F, G, I, J	K, N	O, P, Q
41	AZ-33 Aravaipa Creek	B, C	F, I, J	K, M, N	O, P, Q
42	AZ-34 Lower Verde River	A, B, C	F, G, I, J	K, M, N	O, P, Q
43	AZ-35 Gila River 3	A, B, C	F, G, I, J	K, N	O, P, Q
44	AZ-36 Pinto Creek North	B, C	F, I, J	K, N	O, P, Q
45	AZ-37 Florida Wash	B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
46	NM-1 San Juan River 1	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
47	NM-3 San Francisco River 2	B, C	E, F, G, H, I	K, L, M, N	O, P, Q
48	NM-4 Gila River 2	B, C	E, F, G, I, J	K, L, M, N	O, P, Q

49	NM-5 Mimbres River	B, C	F, I	K, M, N	O, P, Q
50	NM-6 Upper Rio Grande 1	A, B, C	E, F, G, H, I	K, L, M, N	O, P, Q
51	NM-7 Middle Rio Grande 2	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
52	NM-8 Middle Rio Grande 1	A, B, C, D	E, F, G, H, I, J	K, L, M, N	O, P, Q
53	NM-9 Upper Gila River	B, C	E, F, G, I, J	K, L, M, N	O, P, Q
54	CO-1 Yampa River	B, C	E, F, G, H, I, J	K, M, N	O, P, Q
55	CO-2 Colorado River 3	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
56	CO-3 North Fork Gunnison River	B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
57	CO-4 Uncompahgre River	B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
58	CO-5 Gunnison River	B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
59	CO-6 Rio Grande 3	B, C	F, G, H, I, J	K, M, N	O, P, Q
60	CO-7 Conejos River	B, C	F, G, H, I, J	K, M, N	O, P, Q
61	UT-1 Green River 1	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
62	UT-2 Pigeon Water Creek and Lake Fork River	B, C	F, G, H, I, J	K, L, M, N	O, P, Q
63	UT-3 Colorado River 4	B, C	E, G, H, I	K, M	O, P, Q
64	UT-4 Dolores River	B, C	G, I	K, M	O, P, Q
65	UT-5 Green River 2	B, C		K, M	O, P, Q
66	UT-6 San Juan River 2	B, C, D		K, M, N	O, P, Q
67	UT-7 San Juan River 3	B, C	I	K, M, N	O, P, Q
68	UT-8 Virgin River 2	A, B, C	E, F, G, H, I, J	K, L, M, N	O, P, Q
69	ID-1 Snake River 1	A, B, C, D	E, F, G, H, I	K, L, M, N	O, P, Q
70	ID-2 Snake River 2	A, B, C	E, F, G, H, I	K, L, M, N	O, P, Q
71	ID-3 Big Wood River	B, C	E, F, G, H, I	K, L, M, N	O, P, Q
72	ID-4 Henry's Fork and Teton Rivers	A, B, C	E, F, G, H, I	K, L, M, N	O, P, Q
73	NV-1 Upper Muddy River	B, C, D	E, F, G, H, I, J	K, L, M, N	O, P, Q
74	NV-3 Lower Muddy River	A, B, C	E, F, G, H, I, J	K, L, N	O, P, Q
75	NV-4 Carson River	A, B, C, D	E, F, G, H, I, J	K, L, N	O, P, Q
76	NV/AZ-1 Virgin River 1	B, C, D	E, F, G, H, I, J	K, L, M, N	O, P, Q
77	WY-1 Green River 3	A, B, C	E, F, G, I, J	K, L, M, N	O, P, Q

78	WY/UT–1 Henry’s Fork of Green River	B, C	F, G, H, I	K, M	O, P, Q
79	TX–1 Arroyo Caballo, Rio Grande	A, B, C	E, F, G, H I	K, L, M, N	O, P, Q
80	TX–2 Terlingua Creek and Rio Grande	A, B, C		K, M, N	O, P, Q

*Definition of Codes.* Threats from alteration of hydrology: (A) Change in hydrology from upstream dams; (B) surface diversions; (C) groundwater withdrawals; and (D) fluctuating reservoir levels. Threats from floodplain encroachment: (E) Agricultural development; (F) other development (residential, industrial, etc.); (G) bank stabilization; (H) levee construction and maintenance; (I) road and bridge construction and maintenance; and (J) gravel mining. Other threats: (K) Overgrazing; (L) pesticide drift; (M) woodcutting; and (N) recreation. Special management considerations: (O) Manage hydrology to mimic natural flows and floodplain processes; (P) prevent encroachment into floodplain; and (Q) control expansion of and habitat degradation caused by nonnative vegetation.

### **California (6 Units)**

#### *Unit 1: CA–1 Eel River; Humboldt County*

Proposed critical habitat unit CA–1 is 4,909 ac (1,987 ha) in extent. It is an 8-mi (13-km)-long continuous segment of the lower Eel River from west of the town of Fortuna downstream to a point in the estuary (mouth) of the lower Eel River in Humboldt County, California. The entire proposed critical habitat unit is privately owned. The site represents the northwestern limit of the known current breeding range of the species.

*Unit 2: CA–2 Sacramento River; Colusa, Glenn, Butte, and Tehama Counties*

Proposed critical habitat unit CA–2 is 35,418 ac (14,333 ha) in extent. It is a 69-mi (111-km)-long continuous segment of the Sacramento River starting 5 mi (8 km) southeast of the city of Red Bluff in Tehama County, California, to the downstream boundary of the Colusa-Sacramento River State Recreation Area next to the town of Colusa in Colusa County, California. The middle segment of the river flows through Butte and Glenn Counties. Approximately 18,827 ac (7,619 ha), or 53 percent, of proposed unit CA–2 are privately owned; 6,375 ac (2,580 ha), or 7 percent, are in State ownership and include Woodson Bridge State Recreation Area, Bidwell–Sacramento River State Park, and Colusa State Recreation Area managed by the California Department of Parks and Recreation; 14 ac (6 ha) is Cachil Dehe Band of the Wintun Indian tribal land; and 10,203 ac (4,129 ha), or 12 percent, are in Federal ownership located on the Sacramento River National Wildlife Refuge (NWR) managed by the U.S. Fish and Wildlife Service. State and county road crossings account for less than 1 percent of total proposed unit CA–2 ownership. This site has been a major nesting area for the species in the recent past. It is an important area to maintain for occupancy during species recovery.

*Unit 3: CA–3 Sutter Bypass; Sutter County*

Proposed critical habitat unit CA–3 is 1,090 ac (441 ha) in extent. It is a 7-mi (11-km)-long continuous segment of the Sutter Bypass starting upstream at a point on the

Sutter Bypass 8 mi (13 km) west of Yuba City in Sutter County, California, primarily on the Sutter NWR. Approximately 524 ac (212 ha), or 48 percent, of proposed unit CA-3 are privately owned, and 566 ac (229 ha), or 52 percent, are in Federal ownership located on the Sutter NWR managed by the U.S. Fish and Wildlife Service. The site has recently been one of the most regularly occupied sites in the Sacramento Valley and provides a movement corridor between larger habitat patches.

*Unit 4: CA-4 South Fork Kern River Valley; Kern County*

Proposed critical habitat unit CA-4 is 2,862 ac (1,158 ha) in extent. It is a 8-mi (13-km)-long continuous segment of the South Fork Kern River from west of the town of Onyx downstream to Lake Isabella, and includes the upper 0.6 mi (1.0 km) of Lake Isabella in Kern County, California. Approximately 1,644 ac (665 ha), or 57 percent, of proposed Unit CA-4 are privately owned, and 1,218 ac (493 ha), or 43 percent, are in Federal ownership located on the Sequoia National Forest managed by the USFS. Numbers of breeding western yellow-billed cuckoos have been stable at this site. The site provides a stopover area or movement corridor between western yellow-billed cuckoos breeding on the Colorado River and the Sacramento River.

*Unit 5: CA-5 Owens River; Inyo County*

Proposed critical habitat unit CA-5 is 1,598 ac (647 ha) in extent. It is a 26-mi (42-km)-long continuous segment of the Owens River from Steward Lane, located 3 mi

(5 km) southeast of the town of Big Pine, south to a point on the Owens River 4 mi (7 km) southeast of the town of Independence, within Inyo County, California.

Approximately 1,597 ac (647 ha) are owned and managed by the Los Angeles Department of Water and Power (LADWP), and 1 ac (less than 1 ha) is in Federal ownership managed by BLM. This site provides nesting habitat for multiple pairs of western yellow-billed cuckoos. The site also provides a movement corridor to habitat farther north.

*Unit 6: CA-6 Prado Flood Control Basin; Riverside County*

Proposed critical habitat unit CA-6, the Prado Flood Control Basin, is 4,406 ac (1,784 ha). It is located in Riverside County, approximately 4 mi (7 km) west of the city of Corona, Riverside County, California. The Prado Basin is a wetland and riparian complex that is formed by the impoundment of the Santa Ana River behind Prado Flood Control Dam (Prado Dam). Chino Creek, Mill (Cucamonga) Creek, and Temescal Wash are tributaries to the Santa Ana River that meet within Prado Basin. The dam is operated primarily for flood control. The Prado Basin is not permanently inundated. Instead, water is only temporarily impounded behind the dam, leaving much of Prado Basin's area open most of the time, which has allowed riparian vegetation to grow over much of the area. The Santa Ana River forms a 4-mi (6-km)-long continuous segment of riparian habitat. Approximately 1,300 ac (526 ha), or 30 percent, are in Federal ownership managed by the U.S. Army Corps of Engineers, and 3,106 ac (1,257 ha), or 70 percent, of proposed unit CA-6 are owned and managed by the Orange County Water District

(OCWD), or is privately owned. The site provides a movement corridor between larger habitat patches. Tamarisk and giant reed (*Arundo donax*), nonnative species that reduce the quality of the habitat, are a major component at this site. The site is important to the conservation of the species because it is the largest remaining block of riparian habitat in this region into which a recovering population can expand and the only remaining site in southwestern California where the species has recently nested.

### **California – Arizona (2 Units)**

*Unit 7: CA/AZ–1 Colorado River 1; Imperial, Riverside, and San Bernardino Counties, California; Yuma and La Paz Counties, Arizona*

Proposed critical habitat unit CA/AZ–1 is 78,961 ac (31,954 ha) in extent. It is a 139-mi (224-km)-long continuous segment of the Colorado River from 2 mi (3 km) south of the town of Earp in La Paz County, Arizona, south to the Mexican border in Imperial County, California. This segment passes through Riverside and San Bernardino Counties in California, and Yuma County in Arizona. Approximately 19,713 ac (7,978 ha), or 25 percent, of proposed Unit CA–AZ–1 are privately owned; 22,485 ac (9,099 ha), or 28 percent, are Tribal lands located on the Colorado River Indian Reservation; 4,187 ac (1,695 ha), or 5 percent, are in State ownership located on the Picacho State Recreation Area managed by the California Department of Parks and Recreation and Mittry Lake Wildlife Area managed by Arizona Game and Fish Department; and 32,576 ac (13,183 ha), or 41 percent, are in Federal ownership located on Cibola NWR and Imperial NWR



managed by the U.S. Fish and Wildlife Service. The site has a small existing number of breeding western yellow-billed cuckoos, but has great potential for riparian habitat restoration, which is currently being implemented. Western yellow-billed cuckoos are colonizing these restoration sites as soon as they provide suitable habitat. It provides a movement corridor to habitat patches farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 8: CA/AZ-2 Colorado River 2; San Bernardino County, California; Mojave County, Arizona*

Proposed critical habitat unit CA/AZ-2 is 23,452 ac (9,491 ha) in extent. It is a 23-mi (37-km)-long continuous segment of the Colorado River between the Interstate 40 Bridge, including Topock Marsh in San Bernardino County, California, and upstream to the Arizona-Nevada border in Mojave County, Arizona. Approximately 3,532 ac (1,429 ha), or 15 percent, of proposed Unit CA/AZ-2 are privately owned; 4,730 ac (1,914 ha), or 20 percent, are Tribal lands located on the Fort Mojave Indian Reservation; 1 ac (less than 1 ha), or less than 1 percent, is owned by State governments; and 15,189 ac (6,147 ha), or 65 percent, are in Federal ownership located on the Havasu NWR managed by the U.S. Fish and Wildlife Service. The site has a small existing number of western yellow-billed cuckoos, and has great potential for riparian habitat restoration, which is currently being implemented. It also provides a movement corridor to habitat patches farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major habitat component of this unit.

**Arizona (37 Units)***Unit 9: AZ-1 Bill Williams River; Mojave and La Paz Counties*

Proposed critical habitat unit AZ-1 is 3,390 ac (1,372 ha) in extent and is a 11-mi (18-km)-long continuous segment of the Bill Williams River, a tributary to the Colorado River, from the upstream end of Lake Havasu upstream to Castaneda Wash in Mojave and La Paz Counties, Arizona. Approximately 750 ac (304 ha), or 22 percent, of proposed unit AZ-1 are privately owned, and 2,640 ac (1,068 ha), or 78 percent, are in Federal ownership located on the Bill Williams River NWR managed by the U.S. Fish and Wildlife Service. This site is important for breeding western yellow-billed cuckoos as one of the largest and most stable breeding areas over the past 40 years. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 10: AZ-2 Alamo Lake; Mojave and La Paz Counties*

Proposed critical habitat unit AZ-2 totals 2,794 ac (1,131 ha) in extent and is 9 mi (15 km) of continuous stream made up of a 6-mi (10-km)-long continuous segment of the Santa Maria River and a 3-mi (5-km)-long continuous segment of the Big Sandy River that feeds into the Santa Maria River above Alamo Lake State Park in Mojave and La Paz Counties, Arizona. Approximately 954 ac (386 ha), or 34 percent, of proposed unit AZ-2 are privately owned, and 1,840 ac (745 ha), or 66 percent, are in Federal ownership

managed by BLM. No paved roads or road crossings occur within this proposed unit. This is a regular nesting area for western yellow-billed cuckoos. The site provides a movement corridor to habitat sites farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 11: AZ-3 Lake Mead; Mohave County*

Proposed critical habitat unit AZ-3 is 6,734 ac (2,725 ha) in extent and is a 15-mi (24-km)-long continuous segment of the Colorado River between the upstream end of Lake Mead and the Kingman Wash area in Mohave County, Arizona. All of proposed unit AZ-3 is in Federal ownership located on the Lake Mead National Recreation Area managed by the NPS. No State or County road crossings occur with this proposed unit. This site consistently has breeding western yellow-billed cuckoos. The site also provides a movement corridor to breeding sites to the north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 12: AZ-4 Lower Gila River; Yuma County*

Proposed critical habitat unit AZ-4 is 12,047 ac (4,875 ha) in extent and is a 22-mi (35-km)-long continuous segment of the lower Gila River from the vicinity of the Town of Ligurta to upstream of the confluence with Mohawk Wash, and including Quigley Pond Wildlife Management Area in Yuma County, Arizona. Approximately 3,548 ac (1,436 ha), or 29 percent, of proposed unit AZ-4 are privately owned; 1,086 ac

(440 ha), or 9 percent, are in State ownership and managed by the Arizona State Lands Department; and 7,413 ac (3,000 ha), or 62 percent, are in Federal ownership managed by BLM. Several sites in this unit have consistently had breeding western yellow-billed cuckoos. The site provides stopover locations for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 13: AZ-5 Upper Santa Maria River; Yavapai County*

Proposed critical habitat unit AZ-5 is 1,636 ac (662 ha) in extent and is a 15-mi (24-km)-long continuous segment of the upper Santa Maria River from 1 mi (2 km) west of State Highway 93 upstream to near State Highway 96 in Yavapai County, Arizona. Approximately 727 ac (294 ha), or 44 percent, of proposed unit AZ-5 are privately owned; 336 ac (136 ha), or 21 percent, are in State ownership and managed by the Arizona State Lands Department; and 573 ac (232 ha), or 35 percent, are in Federal ownership managed by BLM. The site has been occupied consistently by western yellow-billed cuckoos during the breeding season. The site also provides a migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 14: AZ-6 Hassayampa River; Yavapai and Maricopa Counties*

Proposed critical habitat unit AZ–6 is 2,838 ac (1,148 ha) in extent and is a 13-mi (21-km)-long continuous segment of the Hassayampa River in the vicinity of Wickenburg in Yavapai and Maricopa Counties, Arizona. Approximately 2,237 ac (905 ha), or 79 percent, of proposed unit AZ–6 are privately owned; 10 ac (4 ha), or less than 1 percent, are in State ownership and managed by Arizona State Lands Department; and 591 ac (239 ha), or 21 percent, are in Federal ownership managed by BLM. This site consistently has breeding western yellow-billed cuckoos. The site also provides a movement corridor for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat’s value, is a component of habitat in this unit.

*Unit 15: AZ–7 Gila and Salt Rivers; Maricopa County*

Proposed critical habitat unit AZ–7 is 17,585 ac (7,116 ha) in extent and is a 26-mi (42-km)-long continuous segment of the Gila and Salt Rivers west of Phoenix in Maricopa County, Arizona. Approximately 9,356 ac (3,786 ha), or 53 percent, of proposed unit AZ–7 are privately owned; 868 ac (351 ha), or 5 percent, are Tribal lands located on the Gila River Indian Reservation; 2,642 ac (1,069 ha), or 15 percent, are in State ownership and managed by the Arizona State Lands Department; and 4,719 ac (1,910 ha), or 27 percent, are in Federal ownership managed by BLM. This site has consistently been used by nesting western yellow-billed cuckoos. The site also provides migrant stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat value, is a major component of habitat in this unit.

*Unit 16: AZ-8 Agua Fria River; Yavapai County*

Proposed critical habitat unit AZ-8 is 3,337 ac (1,350 ha) in extent and is made up of a 17-mi (27-km)-long continuous segment of the Agua Fria River (called Ash Creek above the confluence with Sycamore Creek), which is joined by a 5-mi (8-km)-long continuous segment of a tributary called Sycamore Creek. Together they form a total of 22 mi (35.4 km) of continuous segments located approximately 2.5 mi (4.0 km) east of Cordes Lakes in Yavapai County, Arizona. Approximately 1,300 ac (526 ha), or 39 percent, of proposed unit AZ-8 are privately owned; 235 ac (95 ha), or 7 percent, are in State ownership and managed by Arizona State Lands Department; and 1,802 ac (729 ha), or 54 percent, are in Federal ownership managed by BLM. This site has consistently been used by numerous breeding pairs of western yellow-billed cuckoos. The site also provides migration stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 17: AZ-9 Upper Verde River; Yavapai County*

Proposed critical habitat unit AZ-9 is 4,531 ac (1,834 ha) in extent and is a 45-mi (72-km)-long continuous segment of the upper Verde River from the confluence with Granite Creek downstream to Oak Creek below the Town of Cottonwood in Yavapai County, Arizona. Approximately 1,538 ac (622 ha), or 34 percent, of proposed unit AZ-

9 are privately owned; 776 ac (314 ha), or 17 percent, are in State ownership and managed by the Arizona State Lands Department; and 2,217 ac (897 ha), or 49 percent, are in Federal ownership, which includes lands primarily in the Prescott National Forest managed by the USFS and a small portion in Tuzigoot National Monument managed by the NPS. This site is a consistent breeding location for numerous pairs of western yellow-billed cuckoos. The site also provides a movement corridor and migration stopover habitat for western yellow-billed cuckoos moving farther north to breed. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 18: AZ-10 Oak Creek; Yavapai and Coconino Counties*

Proposed critical habitat unit AZ-10 is 1,323 ac (535 ha) in extent and is a 21-mi (34-km)-long continuous segment of Oak Creek from the vicinity of the Town of Cornville at Spring Creek in Yavapai County upstream to State Highway 179 Bridge within the City of Sedona in Coconino County, Arizona. Approximately 730 ac (295 ha), or 55 percent, of proposed unit AZ-10 are privately owned; 160 ac (65 ha), or 12 percent, are in State ownership located in Red Rock State Park managed by Arizona State Parks; and 433 ac (175 ha), or 33 percent, are in Federal ownership located on the Coconino National Forest managed by the USFS. Western yellow-billed cuckoos have consistently bred in this unit. The site also provides a movement corridor and migratory stopover habitat for western yellow-billed cuckoos moving farther to the north. Tamarisk, a

nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 19: AZ-11 Beaver Creek and tributaries; Yavapai County*

Proposed critical habitat unit AZ-11 is 2,082 ac (842 ha) in extent and is a 23-mi (37-km)-long continuous segment of Beaver Creek from the confluence with the Verde River near Camp Verde upstream to above the Town of Rimrock in Yavapai County, Arizona. Approximately 588 ac (238 ha), or 28 percent, of proposed unit AZ-11 are privately owned; 3 ac (1 ha), or less than 1 percent, are Tribal lands located on the Camp Verde Indian Reservation; and 1,491 ac (603 ha), or 72 percent, are in Federal ownership, which includes lands in Montezuma Castle National Monument managed by the NPS and Coconino National Forest managed by the USFS. Numerous western yellow-billed cuckoos have consistently used this site during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 20: AZ-12 Lower Verde River and West Clear Creek; Yavapai County*

Proposed critical habitat unit AZ-12 is 2,053 ac (831 ha) in extent and is made up of a 13-mi (21-km)-long segment of the lower Verde River, which is joined by a 5-mi (8-km)-long continuous segment of a tributary called West Clear Creek. Together they form



an 18-mi (29-km)-long continuous segment located in the vicinity of Camp Verde Indian Reservation. Approximately 1,532 ac (620 ha), or 75 percent, of proposed unit AZ-12 are privately owned; 43 ac (17 ha), or 2 percent, are Tribal lands located on the Camp Verde Indian Reservation; 31 ac (13 ha), or 2 percent, are in State ownership and managed by the State of Arizona; and 447 ac (181 ha), or 22 percent, are in Federal ownership located on the Prescott National Forest managed by the USFS. Numerous western yellow-billed cuckoos have consistently used this site during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 21: AZ-13 Horseshoe Dam; Yavapai County*

Proposed critical habitat unit AZ-13 is 626 ac (253 ha) in extent and is a 3-mi (5-km)-long continuous segment of the Verde River immediately upstream of Horseshoe Dam in Yavapai County, Arizona. The entire unit is in Federal ownership located on the Tonto National Forest managed by the USFS. No State and County roads or road crossings occur within this proposed unit. Western yellow-billed cuckoos have consistently bred at this site. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 22: AZ-14 Tonto Creek; Gila County*

Proposed critical habitat unit AZ–14 is 3,670 ac (1,485 ha) in extent and is made up of a 6-mi (10-km)-long continuous segment of Tonto Creek upstream from the lakebed at Theodore Roosevelt Lake in Gila County, Arizona. Approximately 1,141 ac (462 ha), or 31 percent, of proposed unit AZ–14 are privately owned, and 2,529 ac (1,023 ha), or 69 percent, are in Federal ownership located on the Tonto National Forest managed by the USFS. Numerous western yellow-billed cuckoos have consistently bred in this unit. The site also provides a movement corridor and migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat’s value, is a minor to major component of habitat in this unit.

*Unit 23: AZ–15 Pinal Creek; Gila County*

Proposed critical habitat unit AZ–15 is 419 ac (170 ha) in extent and is a 3-mi (5-km)-long continuous segment of Pinal Creek location north of the Town of Globe in Gila County, Arizona. Approximately 389 ac (157 ha), or 93 percent, of proposed unit AZ–15 are privately owned, and 30 ac (12 ha), or 7 percent, are in Federal ownership located on the Tonto National Forest managed by the USFS. This site has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat’s value, is a minor to major component of habitat in this unit.

*Unit 24: AZ–16 Bonita Creek; Graham County*

Proposed critical habitat unit AZ–16 is 929 ac (376 ha) in extent and is a 6-mi (10-km)-long continuous segment of the Gila River that includes a continuous segment of a tributary called Bonita Creek located northeast of the Town of Thatcher in Graham County, Arizona. Approximately 101 ac (41 ha), or 11 percent, of proposed unit AZ–16 are privately owned, and 828 ac (335 ha), or 89 percent, are in Federal ownership, which includes lands in the Gila Box Riparian National Conservation Area managed by BLM. This site has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 25: AZ–17 San Francisco River 1; Greenlee County*

Proposed critical habitat unit AZ–17 is a 1,327 ac (537 ha) in extent and is a 4-mi (6-km)-long continuous segment of the San Francisco River that includes a continuous segment of a tributary called Dix Creek located approximately 6 mi (9.6 km) west of the border with New Mexico in Greenlee County, Arizona. Approximately 135 ac (55 ha), or 10 percent, of proposed unit AZ–17 are privately owned, and 1,192 ac (482 ha), or 90 percent, are in Federal ownership located on the Apache-Sitgreaves National Forest managed by the USFS. No State or County road crossings occur within this proposed unit. This unit has been consistently occupied by western yellow-billed cuckoos during

the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 26: AZ-18 Upper San Pedro River; Cochise County*

Proposed critical habitat unit AZ-18 is 21,786 ac (8,816 ha) in extent and is a 83-mi (133-km)-long segment of the Upper San Pedro River from the border with Mexico north to the vicinity of the Town of Saint David in Cochise County, Arizona.

Approximately 9,145 ac (3,701 ha), or 42 percent, of proposed unit AZ-18 are privately owned; 1,292 ac (523 ha), or 6 percent, are in State ownership and managed by the Arizona State Lands Department; and 11,349 ac (4,593 ha), or 52 percent, are in Federal ownership located on the San Pedro Riparian National Conservation Area managed by BLM. This unit has one of the largest remaining breeding groups of the western yellow-billed cuckoo and is consistently occupied by a large number of pairs. The site also provides a movement corridor for Western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 27: AZ-19 Hooker Hot Springs; Cochise County*

Proposed critical habitat unit AZ-19 is 375 ac (152 ha) in extent and is a 3-mi (5-km)-long forked segment of a tributary to the Lower San Pedro River at Hooker Hot

Springs in Cochise County, Arizona. Approximately 208 ac (84 ha), or 55 percent, of proposed unit AZ–19 are privately owned; 4 ac (2 ha), or 1 percent, are in State ownership and managed by the Arizona State Lands Department; and 163 ac (66 ha), or 43 percent, are in Federal ownership managed by BLM. No State or County road crossings occur within this proposed unit. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a migratory stopover location. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 28: AZ–20 Lower San Pedro River and Gila River; Cochise, Pima, and Pinal Counties*

Proposed critical habitat unit AZ–20 is 23,399 ac (9,469 ha) in extent and is a 59-mi (95-km)-long segment of the Lower San Pedro River from above the Town of Mammoth in Pima County downstream to join the Gila River, where it continues downstream to below the Town of Kearny in Pinal County, Arizona. Approximately 17,431 ac (7,054 ha), or 75 percent, of proposed unit AZ–20 are privately owned; 729 ac (295 ha), or 3 percent, are Tribal lands located on the San Carlos Indian Reservation; 2,282 ac (923 ha), or 10 percent, are in State ownership and managed by the Arizona State Lands Department; and 2,957 ac (1,197 ha), or 13 percent, are in Federal ownership managed by BLM. This is an important breeding area for western yellow-billed cuckoos and is consistently occupied by a number of pairs during the breeding season. The site also provides a movement corridor and migratory stopover location for western yellow-

billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 29: AZ-21 Picacho Reservoir – Flood Control Basin; Pinal County*

Proposed critical habitat unit AZ-21 is 2,789 ac (1,129 ha) in extent and is a 2-mi (3-km)-long reservoir located 11 mi (18 km) south of Coolidge in Pinal County, Arizona. Approximately 1,513 ac (612 ha), or 54 percent, of proposed unit AZ-21 are privately owned; 941 ac (381 ha), or 34 percent, are in State ownership and managed by the Arizona State Lands Department; and 335 ac (136 ha), or 12 percent, are in Federal ownership managed by BLM. This unit is consistently occupied by western yellow-billed cuckoos. The site also provides migratory stopover habitat. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 30: AZ-22 Peritas Wash; Pima County*

Proposed critical habitat unit AZ-22 is 894 ac (362 ha) in extent and is a 4-mi (6-km)-long continuous segment of Peritas Wash located approximately 20 mi (30 km) west of the Town of Green Valley in Pima County, Arizona. Approximately 724 ac (293 ha), or 81 percent, of proposed unit AZ-22 are State-owned, and 170 ac (69 ha), or 19 percent, are in Federal ownership located on the Buenos Aires NWR managed by the U.S. Fish and Wildlife Service. No State and County roads occur within this proposed unit. This unit has been consistently occupied by western yellow-billed cuckoos during

the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 31: AZ-23 Arivaca Wash and San Luis Wash; Pima County*

Proposed critical habitat unit AZ-23 is 5,765 ac (2,333 ha) in extent and is made up of two washes that join to form a 17-mi (27-km)-long continuous segment that is comprised of 9 mi (15 km) of Arivaca Wash and 8 mi (13 km) of San Luis Wash. The unit is located about 10 mi (16 km) north of the border of Mexico near the Town of Arivaca in Pima County, Arizona. Approximately 1,014 ac (410 ha), or 18 percent, of proposed unit AZ-23 are privately owned; 89 ac (36 ha), or 2 percent, are in State ownership and managed by the Arizona State Lands Department; and 4,662 ac (1,887 ha), or 81 percent, are in Federal ownership located on the Buenos Aires NWR managed by the U.S. Fish and Wildlife Service. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 32: AZ-24 Sonoita Creek; Santa Cruz County*

Proposed critical habitat unit AZ-24 is 1,610 ac (652 ha) in extent and is a 12-mi (19-km)-long segment of Sonoita Creek from the Town of Patagonia downstream to a

point on the creek approximately 4 mi (6 km) east of the Town of Rio Rico in Santa Cruz County, Arizona. Approximately 835 ac (338 ha), or 52 percent, of proposed unit AZ–24 are privately owned, and 775 ac (314 ha), or 48 percent, are in State ownership located on Patagonia Lake State Park managed by the Arizona State Parks. This is a consistent site for a number of pairs of western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat’s value, is a minor to major component of habitat in this unit.

*Unit 33: AZ–25 Upper Cienega Creek; Pima County*

Proposed critical habitat unit AZ–25 is 5,204 ac (2,106 ha) in extent and is made up of two washes that join to form a 14-mi (23-km)-long continuous segment and is comprised of 10 mi (16 km) of Cienega Creek and 4 mi (7 km) of Empire Gulch located about 8 mi (12 km) northeast of the Town of Sonoita in Pima County, Arizona. Approximately 574 ac (232 ha), or 11 percent, are in State ownership and managed by the Arizona State Lands Department, and 4,630 ac (1,874 ha), or 89 percent, are in Federal ownership located on the Coronado National Forest managed by the USFS. No State and County roads occur within this proposed unit. This unit is consistently occupied by a number of pairs of western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor for western yellow-billed cuckoos nesting farther north. Tamarisk, a nonnative species that reduces the habitat’s value, is a minor to major component of habitat in this unit.



*Unit 34: AZ-26 Santa Cruz River; Santa Cruz County*

Proposed critical habitat unit AZ-26 is 3,689 ac (1,493 ha) in extent and is a 5-mi (8-km)-long segment of the Santa Cruz River in the vicinity of the Town of Tubac in Santa Cruz County, Arizona. This proposed unit AZ-26 is entirely privately owned. This unit has consistently been occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor for western yellow-billed cuckoos nesting farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 35: AZ-27 Black Draw; Cochise County*

Proposed critical habitat unit AZ-27 is 890 ac (360 ha) in extent and is a 4-mi (6-km)-long segment of Black Draw starting on the border with Mexico and located approximately 17 mi (28 km) east of the City of Douglas in Cochise County, Arizona. Approximately 440 ac (178 ha), or 49 percent, of proposed unit AZ-27 are privately owned; 45 ac (18 ha), or 5 percent, are in State ownership and managed by the Arizona State Lands Department; and 405 ac (164 ha), or 46 percent, are in Federal ownership, which includes lands in the San Bernardino NWR managed by the U.S. Fish and Wildlife Service. No State or County road crossings occur within this proposed unit. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The

site also provides a migratory stopover area. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 36: AZ-28 Gila River 1; Graham County*

Proposed critical habitat unit AZ-28 is 20,726 ac (8,388 ha) in extent and is a 66-mi (106-km)-long segment of the Gila River from 12 mi (19 km) upstream from Safford and downstream to San Carlos Reservoir. Approximately 9,547 ac (3,864 ha), or 46 percent, of proposed unit AZ-28 are privately owned; 10,183 ac (4,121 ha), or 49 percent, are Tribal lands located on the San Carlos Indian Reservation; 216 ac (87 ha), or 1 percent, are in State ownership and managed by the Arizona State Lands Department; and 780 ac (316 ha), or 4 percent, are in Federal ownership managed by BLM. No State or County road crossings occur within this proposed unit. This unit is consistently occupied by a number of pairs of western yellow-billed cuckoos during the breeding season. The site also provides a migration stopover and movement corridor habitat. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 37: AZ-29 Salt River; Gila County*

Proposed critical habitat unit AZ-29 is 2,590 ac (1,048 ha) in extent and is a 5-mi (8-km)-long continuous segment of the Salt River upstream from the lakebed at Theodore Roosevelt Lake in Gila County, Arizona. Approximately 121 ac (49 ha), or 5 percent, of

proposed unit AZ–29 are privately owned, and 2,469 ac (999 ha), or 95 percent, are in Federal ownership located on the Tonto National Forest managed by the USFS. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat’s value, is a minor to major component of habitat in this unit.

*Unit 38: AZ–30 Lower Cienega Creek; Pima County*

Proposed critical habitat unit AZ–30 is 2,360 ac (955 ha) in extent and is an 11-mi (18-km)-long continuous segment of Cienega Creek about 15 mi (24 km) southeast of Tucson in Pima County, Arizona. Approximately 1,601 ac (648 ha), or 68 percent, of proposed unit AZ–30 are privately owned, and 759 ac (307 ha), or 32 percent, are in State ownership and managed the Arizona State Lands Department. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat’s value, is a minor to major component of habitat in this unit.

*Unit 39: AZ–31 Blue River; Greenlee County*

Proposed critical habitat unit AZ–31 is 1,025 ac (415 ha) in extent and is an 8-mi (13-km)-long continuous segment of the Blue River in Greenlee County, Arizona. The

entire unit is in Federal ownership located on the Apache Sitgreaves National Forest managed by the USFS. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site provides a movement corridor. Tamarisk, a nonnative species that reduces the habitat's value, is a minor component of habitat in this unit.

*Unit 40: AZ-32 Pinto Creek South; Gila County*

Proposed critical habitat unit AZ-32 is 373 ac (151 ha) in extent and is a 4-mi (6-km)-long continuous segment of Pinto Creek in Gila County, Arizona. Approximately 5 ac (2 ha), or 1 percent, of proposed unit AZ-32 are privately owned, and 368 ac (149 ha), or 99 percent, are in Federal ownership located on the Tonto National Forest managed by the USFS. The site also provides migratory stopover habitat. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 41: AZ-33 Aravaipa Creek; Pima and Graham Counties*

Proposed critical habitat unit AZ-33 is 1,209 ac (489 ha) in extent and is a 9-mi (15-km)-long continuous segment of Aravaipa Creek in Pima and Graham Counties, Arizona. Approximately 738 ac (299 ha), or 61 percent, of proposed unit AZ-33 are privately owned; 1 ac (less than 1 ha) is in State ownership and managed by the Arizona State Lands Department; and 470 ac (190 ha), or 39 percent, are in Federal ownership

managed by BLM. This unit has consistently been occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 42: AZ-34 Lower Verde River; Maricopa County*

Proposed critical habitat unit AZ-34 is 1,079 ac (437 ha) in extent and is a 6-mi (10-km)-long continuous segment of the Lower Verde River downstream from Bartlett Dam in Maricopa County, Arizona. Approximately 16 ac (6 ha), or 1 percent, of proposed unit AZ-34 are privately owned, and 1,063 ac (430 ha), or 99 percent, are in Federal ownership located on the Tonto National Forest managed by the USFS. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 43: AZ-35 Gila River 3; Graham and Greenlee Counties*

Proposed critical habitat unit AZ-35 is 2,194 ac (888 ha) and 22 mi (34 km) in extent. It is a 12-mi (18-km)-long continuous segment of the Gila River, 9 mi (14 km) on Eagle Creek, and 1 mi (2 km) on the San Francisco River in Graham and Greenlee Counties, Arizona. Approximately 1,067 ac (432 ha), or 49 percent, of proposed unit AZ-35 are privately owned; 1 ac (less than 1 ha), or less than 1 percent, is in State

ownership and managed by the Arizona State Lands Department; and 1,126 acres (456 ha), or 51 percent, are in Federal ownership located on the Gila Box Riparian National Conservation Area managed by BLM. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor for migrating western yellow-billed cuckoos. Tamarisk, a nonnative species that reduces the habitat's value, is a minor component of habitat in this unit.

*Unit 44: AZ-36 Pinto Creek North; Gila County*

Proposed critical habitat unit AZ-36 is 427 ac (173 ha) in extent and is a 6-mi (10-km)-long continuous segment of Pinto Creek in Gila County, Arizona.

Approximately 12 ac (5 ha), or 3 percent, of proposed unit AZ-36 are privately owned, and 415 ac (168 ha), or 97 percent, are in Federal ownership located on the Tonto National Forest managed by the USFS. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migration stopover habitat. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 45: AZ-37 Florida Wash; Pima County*

Proposed critical habitat unit AZ-37 is 188 ac (76 ha) in extent and is a 4-mi (6-km)-long continuous segment of Florida Wash and tributaries in Pima County, Arizona.

Approximately 43 ac (17 ha), or 23 percent, of proposed unit AZ-36 are privately owned;

32 ac (13 ha), or 17 percent, are in State ownership and managed by the Arizona State Lands Department; and 113 ac (46 ha), or 61 percent, are in Federal ownership managed by BLM. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site provides a movement corridor between larger habitat patches. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

### **New Mexico (8 Units)**

#### *Unit 46: NM-1 San Juan River I; San Juan County*

Proposed critical habitat unit NM-1 is 6,354 ac (2,571 ha) in extent and is a 35-mi (56-km)-long continuous segment of the San Juan River between just downstream of Fruitland to just downstream of Blanco in San Juan County, New Mexico.

Approximately 4,456 ac (1,803 ha), or 70 percent, of proposed unit NM-1 are privately owned; 1,041 ac (421 ha), or 16 percent, are Tribal lands located on the Navajo Nation; 177 ac (72 ha), or 3 percent, are in State ownership and managed by the New Mexico State Lands Office; and 680 ac (275 ha), or 11 percent, are in Federal ownership managed by BLM. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos breeding farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 47: NM–3 San Francisco River 2; Catron County*

Proposed critical habitat unit NM–3 is 2,039 ac (825 ha) in extent and is a 10-mi (16-km)-long continuous segment of the San Francisco River near the Town of Glenwood in Catron County, New Mexico. This segment includes 1.2 mi (2 km) up Whitewater Creek from the confluence of the San Francisco River near the Town of Glenwood. Approximately 1,291 ac (522 ha), or 63 percent, of proposed unit NM–3 are privately owned; 10 ac (4 ha), or less than 1 percent, are in State ownership and managed by the New Mexico State Lands Office; and 738 ac (299 ha), or 36 percent, are in Federal ownership located on the Gila National Forest managed by the USFS. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor component of habitat in this unit.

*Unit 48: NM–4 Gila River 2; Grant and Hidalgo Counties*

Proposed critical habitat unit NM–4 is 4,179 ac (1,691 ha) in extent and is a 24-mi (37-km)-long continuous segment of the Gila River from 10 mi (16 km) downstream from the town of Cliff to 10 mi (16 km) upstream of the town of Gila in Grant County, New Mexico. Approximately 3,003 ac (1,215 ha), or 72 percent, of proposed unit NM–4 are privately owned; 201 ac (81 ha), or 5 percent, is in State ownership and managed by the New Mexico State Lands Office; and 975 ac (395 ha), or 23 percent, are in Federal



ownership managed by BLM. This unit is consistently occupied by a large number of western yellow-billed cuckoos during the breeding season and is an important breeding location for the species. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 49: NM-5 Mimbres River; Grant County*

Proposed critical habitat unit NM-5 is 260 ac (105 ha) in extent and is a 3-mi (5-km)-long continuous segment of the Mimbres River south of the town of Mimbres in Grant County, New Mexico. The entire proposed unit NM-5 is privately owned. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 50: NM-6 Upper Rio Grande I; Rio Arriba County*

Proposed critical habitat unit NM-6 is 1,830 ac (741 ha) in extent and is a 10-mi (16-km)-long continuous segment of the upper Rio Grande from the San Juan Pueblo to near Alcalde in Rio Arriba County, New Mexico. Approximately 517 ac (209 ha), or 28 percent, of proposed unit NM-6 are privately owned, and 1,313 ac (532 ha), or 72 percent, are Tribal lands located on the San Juan Pueblo. This site is consistently occupied by western yellow-billed cuckoos during the breeding season. The site also

provides a movement corridor for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 51: NM-7 Middle Rio Grande 2; Santa Fe and Rio Arriba Counties*

Proposed critical habitat unit NM-7 is 1,173 ac (475 ha) in extent and is a 6-mi (10-km)-long continuous segment of the Middle Rio Grande starting from the Highway 502 Bridge at the south end of the San Ildefonso Pueblo upstream to a point on the river in Rio Arriba County, New Mexico. The entire proposed unit NM-7 is Tribal lands located on the San Ildefonso Pueblo, Santa Clara Pueblo, and San Juan Pueblo. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 52: NM-8 Middle Rio Grande 1; Sierra, Socorro, Valencia, Bernalillo, and Sandoval Counties*

Proposed critical habitat unit NM-8 is 61,959 ac (25,074 ha) in extent and is an approximate 170-mi (273-km)-long continuous segment of the lower Rio Grande from Elephant Butte Reservoir in Sierra County upstream through Socorro, Valencia, and Bernalillo Counties to below Cochiti Dam in Cochiti Pueblo in Sandoval County, New

Mexico. Approximately 31,953 ac (12,931 ha), or 52 percent, of proposed unit NM–8 are privately owned; 938 ac (380 ha), or 2 percent, are in State ownership, including lands managed by the New Mexico State Lands Office; 9,509 ac (3,848 ha), or 15 percent, are Tribal lands located on Isleta Pueblo, Sandia Pueblo, San Felipe Pueblo, Santa Ana Pueblo, Santa Domingo Pueblo, and Cochiti Pueblo; and 19,559 ac (7,915 ha), or 32 percent, are in Federal ownership located on Bosque del Apache NWR and Sevilleta NWR managed by the U.S. Fish and Wildlife Service, and lands owned and managed by BLM and Reclamation down to river-mile 54. This unit is consistently occupied by a large number of breeding western yellow-billed cuckoos and currently is the largest breeding group of the species north of Mexico. The site also provides a movement corridor for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat’s value, is a major component of habitat in this unit. We are seeking information on the appropriateness of including areas down to river-mile 42 as critical habitat for the western yellow-billed cuckoo (see **Information Requested** section).

*Unit 53: NM–9 Upper Gila River; Hidalgo and Grant Counties*

Proposed critical habitat unit NM–9 is 4,614 ac (1,867 ha) in extent and is a 30-mi (48-mi)-long continuous segment of the Gila River from the Arizona-New Mexico border 5 mi (8 km) downstream from Virden in Hidalgo County upstream to 8 mi (13 km) upstream from Red Rock in Grant County, New Mexico. Approximately 3,207 ac (1,298 ha), or 69 percent, of proposed unit NM–9 are privately owned; 423 ac (171 ha), or 9

percent, are in State ownership and managed by the New Mexico State Lands Office; and 984 ac (398 ha), or 21 percent, are in Federal ownership, which includes lands managed by BLM and lands located on the Gila National Forest managed by the USFS. This site is consistently occupied by numerous pairs of western yellow-billed cuckoos during the breeding season. The site provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

### **Colorado (7 Units)**

#### *Unit 54: CO-1 Yampa River; Moffat and Routt Counties*

Proposed critical habitat unit CO-1 is 6,938 ac (2,808 ha) in extent and is a 20-mi (32-km)-long continuous segment of the Yampa River from near the Town of Craig in Moffat County to near the Town of Hayden in Routt County, Colorado. Approximately 5,739 ac (2,322 ha), or 83 percent, of proposed unit CO-1 are privately owned, and 1,199 ac (485 ha), or 17 percent, are located on Yampa River State Wildlife Area managed by the Colorado Parks and Wildlife. This site has regularly been occupied by western yellow-billed cuckoos during the breeding season. This high-elevation site is near the current northern limit of the current breeding range of the species.

#### *Unit 55: CO-2 Colorado River 3; Mesa County*

Proposed critical habitat unit CO–2 is 4,002 ac (1,620 ha) in extent and is a 25-mi (40-km)-long continuous segment of the Colorado River in the vicinity of Grand Junction in Mesa County, Colorado. Approximately 3,553 ac (1,438 ha), or 89 percent, of proposed unit CO–2 are privately owned; 418 ac (169 ha), or 10 percent, are in State ownership located on the Corn Lake and Walker State Wildlife Areas managed by Colorado Parks and Wildlife; and 31 ac (13 ha), or 1 percent, are in Federal ownership managed by BLM. The Colorado River Wildlife Management Area managed by the U.S. Fish and Wildlife Service holds conservation easements on several private parcels in this unit. This unit has been occupied by western yellow-billed cuckoos. The site also provides a migration stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 56: CO–3 North Fork Gunnison River; Delta County*

Proposed critical habitat unit CO–3 is 2,326 ac (941 ha) in extent and is a 16-mi (26-km)-long continuous segment of the North Fork of the Gunnison River between Hotchkiss and Paeonia in Delta County, Colorado. Approximately 2,211 ac (895 ha), or 95 percent, of proposed unit CO–3 are privately owned, and 115 ac (47 ha), or 5 percent, are in Federal ownership, which includes lands in the Hotchkiss National Fish Hatchery managed by the U.S. Fish and Wildlife Service and lands managed by BLM. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 57: CO-4 Uncompahgre River; Delta, Montrose, and Ouray Counties*

Proposed critical habitat unit CO-4 is 4,506 ac (1,824 ha) in extent and is a 37-mi (60-km)-long continuous segment of the Uncompahgre River from the confluence with the Gunnison River in Delta County, upstream through Montrose to south of the Town of Colona in Ouray County, Colorado. Approximately 4,497 ac (1,820 ha), or nearly 100 percent, of proposed unit CO-4 are privately owned; 7 ac (3 ha), or less than 1 percent, are in State ownership located on the Billy Creek State Wildlife Area managed by Colorado Parks and Wildlife; and 2 ac (1 ha), or less than 1 percent, are in Federal ownership managed by BLM. This site has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor and migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 58: CO-5 Gunnison River; Gunnison County*

Proposed critical habitat unit CO-5 is 937 ac (379 ha) in extent and is a 6-mi (10-km)-long continuous segment of the Gunnison River from Blue Mesa Reservoir upstream to Highway 50 in Gunnison County, Colorado. Approximately 921 ac (373 ha), or 98 percent, of proposed unit CO-5 are privately owned, and 16 ac (6 ha), or 2 percent, are in Federal ownership located on the Curecanti National Recreation Area managed by the NPS. This unit has been occupied by western yellow-billed cuckoos during the breeding

season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 59: CO–6 Upper Rio Grande 3; Alamosa and Rio Grande Counties*

Proposed critical habitat unit CO–6 is 9,765 ac (3,952 ha) in extent and is a 45-mi (73-km)-long continuous segment of the Rio Grande from Alamosa in Alamosa County upstream to Alpine in Rio Grande County, Colorado. Approximately 9,751 ac (3,946 ha), or nearly 100 percent, of proposed unit CO–6 are privately owned, and 14 ac (6 ha), or less than 1 percent, are in Federal ownership managed by BLM. This high-elevation unit has been consistently occupied by western yellow-billed cuckoos. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 60: CO–7 Conejos River; Conejos County*

Proposed critical habitat unit CO–7 is 8,986 ac (3,637 ha) in extent and is a 62-mi (100-km)-long continuous segment of the Conejos River from the confluence with the Rio Grande upstream to Fox Creek in Conejos County, Colorado. Approximately 8,609 ac (3,484 ha), or 96 percent, of proposed unit CO–7 are privately owned; 47 ac (19 ha), or 1 percent, are in State ownership, which includes lands in the Sego Springs State Wildlife Area managed by Colorado Parks and Wildlife; and 330 ac (134 ha), or 4 percent, are in Federal ownership managed by BLM. This high-elevation unit has been

consistently occupied by western yellow-billed cuckoos. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

### **Utah (8 Units)**

#### *Unit 61: UT-1 Green River1; Uintah County*

Proposed critical habitat unit UT-1 is 17,256 ac (6,983 ha) in extent and is a 38-mi (61-km)-long continuous segment of the Green River in the vicinity of Ouray in Uintah County, Utah. Approximately 1,296 ac (524 ha), or 8 percent, of proposed unit UT-1 are privately owned; 6,848 ac (2,772 ha), or 40 percent, are Tribal lands located on the Uintah and Ouray Indian Reservation; 4,411 ac (1,786 ha), or 26 percent, are in State-ownership managed by Utah Division of Forestry, Fire, and State Lands; and 4,701 ac (1,902 ha), or 27 percent, are in Federal ownership, which includes lands located on the Ouray NWR managed by the U.S. Fish and Wildlife Service and lands managed by BLM. This unit has consistently had western yellow-billed cuckoos during the breeding season. The site also provides a movement corridor for western yellow-billed cuckoos moving farther north.

#### *Unit 62: UT-2 Pigeon Water Creek and Lake Fork River; Duchesne County*

Proposed critical habitat unit UT-2 is 3,041 ac (1,231 ha) in extent and is a 9-mi (15-km)-long continuous segment of Lake Fork River located approximately 12 mi (19



km) west of the Town of Roosevelt in Duchesne County, Utah. Approximately 1,701 ac (688 ha), or 56 percent, of proposed unit UT-2 are privately owned, and 1,340 ac (543 ha), or 44 percent, are Tribal lands located on the Uintah and Ouray Indian Reservation. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 63: UT-3 Colorado River 4; Grand County, Utah and Mesa County, Colorado*

Proposed critical habitat unit UT-3 is 579 ac (234 ha) in extent and is a 3-mi (5-km)-long continuous segment of the Colorado River that straddles the Utah-Colorado Border between Westwater in Grand County, Utah, to a point 2 mi (3 km) up the river in Mesa County, Colorado. Approximately 132 ac (53 ha), or 23 percent, of proposed unit UT-3 are privately owned; 238 ac (96 ha), or 39 percent, are in State ownership managed by the Utah Division of Forestry, Fire, and State Lands; and 209 ac (85 ha), or 36 percent, are in Federal ownership and managed by BLM. No paved roads or road crossings occur within this proposed unit. This unit has been occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 64: UT-4 Dolores River; Grand County*

Proposed critical habitat unit UT-4 is 401 ac (162 ha) in extent and is a 2-mi (3-km)-long continuous segment of the lower Dolores River near the confluence with the Colorado River in Grand County, Utah. Approximately 136 ac (55 ha), or 34 percent, of proposed unit UT-4 are privately owned; 150 ac (61 ha), or 37 percent, are in State ownership managed by the Utah Division of Forestry, Fire, and State Lands; and 115 ac (47 ha), or 29 percent, are in Federal ownership managed by BLM. No road crossings occur within this proposed unit. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 65: UT-5 Green River 2; San Juan and Wayne Counties*

Proposed critical habitat unit UT-5 is 4,657 ac (1,885 ha) in extent and is a 41-mi (66-km)-long continuous segment of the Green River upstream from the confluence with the Colorado River in both San Juan and Wayne Counties, Utah. The entire unit is in Federal ownership located on the Canyonlands National Park, managed by the NPS. No road crossings occur within this proposed unit. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

*Unit 66: UT-6 San Juan River 2; San Juan County*

Proposed critical habitat unit UT-6 is 2,198 ac (889 ha) in extent and is a 5-mi (8-km)-long continuous segment of the San Juan River at the upper extent of Lake Powell in San Juan County, Utah. The entire unit is in Federal ownership located on the Glen Canyon National Recreation Area managed by the NPS. No paved roads or road crossings occur within this proposed unit. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in this unit.

*Unit 67: UT-7 San Juan River 3; San Juan County*

Proposed critical habitat unit UT-7 is 9,692 ac (3,922 ha) in extent and is a 33-mi (53-km)-long continuous segment of the San Juan River from near Bluff and upstream to a point on the river in San Juan County, Utah. Approximately 299 ac (121 ha), or 3 percent, of proposed unit UT-7 are privately owned; 7,766 ac (3,144 ha), or 80 percent, are Tribal lands located on the Navajo Nation; 38 ac (15 ha), or less than 1 percent, are in State ownership managed by Utah Division of Forestry, Fire, and State Lands; and 1,589 ac (643 ha), or 16 percent, are in Federal ownership managed by BLM. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in the southwest.

*Unit 68: UT–8 Virgin River 2; Washington County*

Proposed critical habitat unit UT–8 is 1,390 ac (562 ha) in extent and is a 13-mi (21-km)-long continuous segment of the Virgin River in the vicinity of St. George in Washington County, Utah. Approximately 1,352 ac (547 ha), or 97 percent, of proposed unit UT–8 are privately owned; 6 ac (2 ha), or less than 1 percent, are in State ownership managed by Utah Division of Forestry, Fire, and State Lands; and 32 ac (13 ha), or 2 percent, are in Federal ownership managed by BLM. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a minor to major component of habitat in the southwest.

**Idaho (4 Units)**

*Unit 69: ID–1 Snake River 1; Bannock and Bingham Counties*

Proposed critical habitat unit ID–1 is 9,294 ac (3,761 ha) in extent and is a 22-mi (35-km)-long continuous segment of the Snake River from the upstream end of the American Falls Reservoir in Bannock County upstream to a point on the Snake River approximately 2 mi (3 km) west of the Town of Blackfoot in Bingham County, Idaho. Approximately 3,343 ac (1,353 ha), or 36 percent, of proposed unit ID–1 are privately

owned; 2 (1 ha), or less than 1 percent, are in State ownership managed by the Idaho Department of Lands; 2,257 ac (913 ha), or 24 percent, are Tribal lands located on the Fort Hall Indian Reservation; and 3,692 ac (1,494 ha), or 40 percent, are in Federal ownership (BIA 117 ac (47 ha), BLM 3,260 ac (1,323 ha), and BOR 315 ac (127 ha)). This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The unit is at the northern limit of the species' current breeding range.

*Unit 70: ID-2 Snake River 2; Bonneville, Madison, and Jefferson Counties*

Proposed critical habitat unit ID-2 is 11,439 ac (4,629 ha) in extent and is a 40-mi (64-km)-long continuous segment of the Snake River from the bridge crossing on the Snake River 2 mi (3 km) east of the Town of Roberts in Madison County through Jefferson County and upstream to vicinity of mouth of Table Rock Canyon in Bonneville County, Idaho. Approximately 5,472 ac (2,214 ha), or 48 percent, of proposed unit ID-2 are privately owned; 106 ac (43 ha), or 1 percent, are in State ownership and managed by Idaho Department of Lands; and 5,861 ac (2,372 ha), or 51 percent, are in Federal ownership, which includes lands managed by BLM and lands located in the Caribou-Targhee National Forest managed by USFS. Portions of Unit 70 (and Unit 72) are within lands designated as the Snake River Area of Critical Environmental Concern (ACEC) by BLM and the Land and Water Conservation Fund (LWCF) program has purchased 32 properties in fee title and set aside approximately 42 conservation easements (22,400 ac (9,065 ha) within the ACEC. The western yellow-billed cuckoo has been identified as a species of concern in the ACEC. State and County road crossings account for less than 1

percent of total ownership of this proposed unit. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The unit is at the northern limit of the species' current breeding range.

*Unit 71: ID-3 Big Wood River; Blaine County*

Proposed critical habitat unit ID-3 is 1,129 ac (457 ha) in extent and is a 7-mi (11-km)-long continuous segment of the Big Wood River downstream from Bellevue in Blaine County, Idaho. Approximately 956 ac (387 ha), or 85 percent, of proposed unit ID-3 are privately owned; 85 ac (34 ha), or 8 percent, are in State ownership and managed by Idaho Department of Lands; and 88 ac (36 ha), or 8 percent, are in Federal ownership managed by BLM. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The unit is at the northern limit of the species' current breeding range.

*Unit 72: ID-4 Henry's Fork and Teton Rivers; Madison County*

Proposed critical habitat unit ID-4 is 3,449 ac (1,396 ha) in extent and is a 6-mi (10-km)-long continuous segment of the Henry's Fork of the Snake River in Madison County from just upstream of the confluence with the Snake River to a point on the river approximately 2 km (1 mi) upstream of the Madison County line in Fremont County, Idaho. Approximately 2,712 ac (1,098 ha), or 79 percent, of proposed unit ID-4 are privately owned; 341 ac (138 ha), or 10 percent, are in State ownership and managed by

the Idaho Department of Lands; and 396 ac (160 ha), or 11 percent, are in Federal ownership managed by BLM (see discussion in Unit 70 of conservation activities within this unit). This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The unit is at the northern limit of the species' current breeding range.

### **Nevada (3 Units)**

#### *Unit 73: NV-1 Upper Muddy River; Clark County*

Proposed critical habitat unit NV-1 is 1,472 ac (596 ha) in extent and is a 5-mi (8-km)-long continuous segment of the Muddy River from upstream of the confluence with the Virgin River at Lake Mead up to the vicinity of the Moapa Indian Reservation in Clark County, Nevada. Approximately 157 ac (64 ha), or 11 percent, of proposed unit NV-1 are privately owned, and 1,315 ac (532 ha), or 89 percent, are in Federal ownership located at Lake Mead managed by Reclamation and the Moapa Valley NWR managed by the U.S. Fish and Wildlife Service. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

#### *Unit 74; NV-3 Lower Muddy River; Clark County*

Proposed critical habitat unit NV-3 is 437 ac (177 km) in extent and is a 2-mi (3-km)-long continuous segment of the Lower Muddy River in Clark County, Nevada. The entire proposed unit is privately owned. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 75; NV-4 Carson River; Lyon County*

Proposed critical habitat unit NV-4 is 4,348 ac (1,760 km) in extent and is a 12-mi (19-km)-long continuous segment of the Carson River in Lyon County, Nevada. Approximately 3,186 ac (1,289 ha), or 73 percent, of proposed unit NV-4 are privately owned; 13 ac (5 ha), or less than 1 percent, are in State ownership located on the Lahontan State Recreation Area and managed by the Nevada State Parks; and 1,149 ac (465 ha), or 26 percent, are in Federal ownership managed by BLM and Reclamation. This unit has consistently been occupied by western yellow-billed cuckoos during the breeding season.

**Nevada-Arizona (1 Unit)**

*Unit 76: NV/AZ-1 Virgin River 1; Clark County, Nevada, and Mohave County, Arizona*



Proposed critical habitat unit NV/AZ-1 is 11,266 ac (4,559 ha) in extent and is a 39-mi (63-km)-long continuous segment of the Virgin River from the upstream extent of Lake Mead in Clark County, Nevada, upstream to a point on the Virgin River downstream from Littlefield in Mohave County, Arizona. Approximately 4,077 ac (1,650 ha), or 36 percent, of proposed unit NV/AZ-1 are privately owned; 52 ac (21 ha), or less than 1 percent, are in State ownership and managed by the Arizona State Lands Department; and 7,137 ac (2,888 ha), or 63 percent, are in Federal ownership managed by BLM. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

### **Wyoming (1 Unit)**

#### *Unit 77: WY-1 Green River 3; Sweetwater County*

Proposed critical habitat unit WY-1 is 7,471 ac (3,023 ha) in extent and is a 28-mi (45-km)-long continuous segment of the Green River in the vicinity of Seedskadee NWR in Sweetwater County, Wyoming. Approximately 1,137 ac (460 ha), or 15 percent, of proposed unit WY-1 are privately owned; 629 ac (255 ha), or 8 percent, are in State ownership and managed by Wyoming Office of State Lands and Investments; and 5,705 ac (2,309 ha), or 76 percent, are in Federal ownership located on the Seedskadee NWR managed by the U.S. Fish and Wildlife Service. This unit is consistently occupied

by western yellow-billed cuckoos during the breeding season. The unit is at the northern limit of the species' current breeding range.

### **Wyoming-Utah (1 Unit)**

*Unit 78: WY/UT-1 Henry's Fork of Green River; Uinta County, Wyoming, and Summit County, Utah*

Proposed critical habitat unit WY/UT-1 is 9,306 ac (3,760 ha) in extent and totals 24 mi (39 km) of continuous stream made up of a 15-mi (24-km)-long continuous segment of the Henry's Fork of the Green River in Uinta and Sweetwater Counties in Wyoming, and a 9-mi (15-km) segment of the Middle Fork of Beaver Creek that originates in Summit County, Utah, and feeds into Henry's Fork near Lonetree in Uinta County, Wyoming. Approximately 8,934 ac (3,615 ha), or 96 percent, of proposed unit WY/UT-1 are privately owned; 228 ac (92 ha), or 3 percent, are in State ownership and managed by the Wyoming Office of State Lands and Investments; and 144 ac (58 ha), or 2 percent, are in Federal ownership including lands located on the Wasatch-Cache National Forest managed by the USFS and lands managed by BLM. This high-elevation unit has been consistently occupied by western yellow-billed cuckoos. The site also provides migratory stopover habitat for western yellow-billed cuckoos moving farther north.

### **Texas (2 Units)**

*Unit 79: TX-1 Arroyo Caballo, Rio Grande; Hudspeth County*

Proposed critical habitat unit TX-1 is 1,261 ac (510 ha) in extent and a 8-mi (13-km)-long continuous segment along the Rio Grande upstream and downstream from Arroyo Caballo in Hudspeth County, Texas. The entire unit is privately owned. This unit is consistently occupied by western yellow-billed cuckoos during the breeding season. The site provides migratory stopover habitat for western yellow-billed cuckoos breeding farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

*Unit 80: TX-2 Terlingua Creek and Rio Grande; Presidio and Brewster Counties*

Proposed critical habitat unit TX-2 is 7,792 ac (3,153 ha) in extent and is a 45-mi (72-km)-long continuous segment from lower Terlingua Creek in Presidio County to the Rio Grande in Brewster County, Texas. The entire unit is in Federal ownership located on Big Bend National Park managed by the NPS. This unit has been consistently occupied by western yellow-billed cuckoos during the breeding season. The site also provides a north-south movement corridor for western yellow-billed cuckoos breeding farther north. Tamarisk, a nonnative species that reduces the habitat's value, is a major component of habitat in this unit.

**Effects of Critical Habitat Designation**

*Section 7 Consultation*

Section 7(a)(2) of the Act requires Federal agencies, including the U.S. Fish and Wildlife Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the U.S. Fish and Wildlife Service on any agency action that is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5<sup>th</sup> and 9<sup>th</sup> Circuit Courts of Appeals have invalidated our regulatory definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9<sup>th</sup> Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5<sup>th</sup> Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions

that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers [USACE] under section 404 of the Clean Water Act (CWA; 33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, or are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action;
- (2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction;
- (3) Are economically and technologically feasible; and
- (4) Would, in the Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

*Application of the “Adverse Modification” Standard*

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for the western yellow-billed cuckoo. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the western yellow-billed cuckoo. These activities include, but are not limited to:

(1) Actions that would remove, thin, or destroy riparian western yellow-billed cuckoo habitat, without implementation of an effective riparian restoration plan that would result in the development of riparian vegetation of equal or better quality in abundance and extent. Such activities could include, but are not limited to, removing,

thinning, or destroying riparian vegetation by mechanical (including controlled fire), chemical, or biological (poorly managed biocontrol agents) means. These activities could reduce the amount or extent of riparian habitat needed by western yellow-billed cuckoos for sheltering, feeding, breeding, and dispersing.

(2) Actions that would appreciably diminish habitat value or quality through direct or indirect effects. These activities could permanently eliminate available riparian habitat and food availability or degrade the general suitability, quality, structure, abundance, longevity, and vigor of riparian vegetation. Such activities could include, but are not limited to, diminished or altered riverflow regimes including water diversion or impoundment, ground water pumping, dam construction and operation, or any other activity which negatively changes the frequency, magnitude, duration, timing, or abundance of surface flow; spraying of pesticides that would reduce insect prey populations within or adjacent to riparian habitat; introduction of nonnative plants, animals, or insects; or habitat degradation from recreation activities. These activities could reduce or fragment the quality or amount or extent of riparian habitat needed by western yellow-billed cuckoos for sheltering, feeding, breeding, and dispersing.

(3) Actions that would permanently destroy or alter western yellow-billed cuckoo habitat. Such activities could include, but are not limited to, discharge of fill material, draining, ditching, tiling, pond construction, and stream channelization (due to roads, construction of bridges, impoundments, discharge pipes, stormwater detention basins, dikes, levees, and others). These activities could permanently eliminate available riparian



habitat and food availability or degrade the general suitability, quality, structure, abundance, longevity, and vigor of riparian vegetation and microhabitat components necessary for nesting, migrating, food, cover, and shelter.

(4) Actions that would result in alteration of western yellow-billed cuckoo habitat from overgrazing of livestock or ungulate (for example, horses, burros) management. Such activities could include, but are not limited to, unrestricted ungulate access and use of riparian vegetation; excessive ungulate use of riparian vegetation during the non-growing season (for example, leaf drop to bud break); overuse of riparian habitat and upland vegetation due to insufficient herbaceous vegetation available to ungulates; and improper herding, water development, or other livestock management actions. These activities could reduce the volume and composition of riparian vegetation, prevent regeneration of riparian plant species, physically disturb nests, alter floodplain dynamics, alter watershed and soil characteristics, alter stream morphology, and facilitate the growth of flammable nonnative plant species.

(5) Actions in relation to the Federal highway system, which could include, but are not limited to, new road construction and right-of-way designation. These activities could eliminate or reduce riparian habitat along river crossings necessary for reproduction, sheltering, or growth of the western yellow-billed cuckoo.

(6) Actions that would involve funding of activities associated with cleaning up Superfund sites, erosion control activities, flood control activities, and communication

towers. These activities could eliminate or reduce habitat for the western yellow-billed cuckoo.

(7) Actions that would affect waters of the United States under section 404 of the CWA. Such activities could include, but are not limited to, placement of fill into wetlands. These activities could eliminate or reduce the habitat necessary for the reproduction, feeding, or growth of the western yellow-billed cuckoo.

## **Exemptions**

### *Application of Section 4(a)(3) of the Act*

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

There are no Department of Defense lands with a completed INRMP within the proposed critical habitat designation.

**Consideration of Impacts under section 4(b)(2) of the Act**

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking

into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise her discretion to exclude the area only if such exclusion would not result in the extinction of the species.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When identifying the benefits of exclusion, we consider, among other things,

whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan that provides equivalent or more conservation when compared to a critical habitat designation.

In the case of western yellow-billed cuckoo, the benefits of critical habitat include public awareness of the western yellow-billed cuckoo presence and the importance of habitat protection, and where a Federal nexus exists, increased habitat protection for western yellow-billed cuckoo due to the protection from adverse modification or destruction of critical habitat.

When we evaluate a management or conservation plan and consider the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized, how the plan provides for the conservation of the essential physical or biological features, whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future, whether the conservation strategies in the plan are likely to be effective, and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of both inclusion and exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion.

If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, the Secretary will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments we receive, we will evaluate whether certain lands in the proposed critical habitat (Table 3) are appropriate for exclusion from the final designation under section 4(b)(2) of the Act. If the analysis indicates that the benefits of excluding lands from the final designation outweigh the benefits of designating those lands as critical habitat, then the Secretary may exercise her discretion to exclude the lands from the final designation. Several tribes have not been identified for potential exclusion at this time; however we will be coordinating and working with all tribes potentially affected by the proposed designation throughout this process and may exclude them from the final designation. Please see *Government-to-Government Relationship with Tribes* section, below, for a complete list of tribes currently within the proposed designation.

Table 3 below provides approximate areas of lands that meet the definition of critical habitat but are under our consideration for possible exclusion under section 4(b)(2) of the Act from the final critical habitat rule.

Table 3. Areas considered for exclusion by critical habitat unit

Unit	Specific Area	Area Meeting the Definition of Critical Habitat,	Area Considered for Possible Exclusion, in
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		<b>in Acres (ha)</b>	<b>Acres (ha)</b>
CA-4	South Fork Kern River Valley	2,862 (1,158)	160 (65)
CA-5	Owens River	1,598 (647)	1,598 (647)
CA-6	Prado Flood Control Basin	4,406 (1,784)	4,406 (1,784)
CA/AZ-1	Colorado River 1	78,961 (31,954)	55,061 (22,292)
CA/AZ-2	Colorado River 2	23,452 (9,491)	20,025 (8,107)
AZ-1	Bill Williams River	3,390 (1,372)	2,640 (1,069)
AZ-2	Alamo Lake	2,794 (1,131)	1,840 (745)
AZ-3	Lake Mead	6,734 (2,725)	6,734 (2,725)
AZ-4	Lower Gila River	12,047 (4,875)	7,413 (3,001)
AZ-7	Gila and Salt Rivers	17,585 (7,116)	868 (351)
AZ-11	Beaver Creek and tributaries	2,082 (842)	3 (1)
AZ-12	Lower Verde River and West Clear Creek	2,053 (831)	43 (17)
AZ-13	Horseshoe Dam	626 (253)	626 (253)
AZ-14	Tonto Creek	3,670 (1,485)	3,155 (1,277)
AZ-20	Lower San Pedro and Gila Rivers	23,399 (9,469)	23,399 (9,469)
AZ-22	Peritas Wash	894 (362)	894 (362)
AZ-23	Arivaca Wash and San Luis Wash	5,765 (2,333)	5,765 (2,333)
AZ-25	Upper Cienega Creek	5,204 (2,106)	5,204 (2,106)
AZ-28	Gila River 1	20,726 (8,388)	10,183 (4,123)
AZ-29	Salt River	2,590 (1,048)	2,469 (1,000)
AZ-30	Lower Cienega Creek	2,360 (955)	2,360 (955)
AZ-34	Lower Verde River	1,079 (437)	1,079 (437)
AZ-37	Florida Wash	188 (76)	188 (76)
NM-1	San Juan River 1	6,354 (2,571)	1,041 (421)
NM-7	Middle Rio Grande 2	1,173 (475)	1,173 (475)
NM-8	Middle Rio Grande 1	61,959 (25,074)	17,096 (6,922)
CO-6	Rio Grande 3	9,765 (3,952)	9,751 (3,947)
CO-7	Conejos River	8,986 (3,637)	8,656 (3,503)
ID-1	Snake River 1	9,294 (3,761)	3,427 (1,312)

We are considering excluding these areas because:

- (1) Their value for conservation will be preserved for the foreseeable future by existing protective actions, or
- (2) They are appropriate for exclusion under the “other relevant factor”

provisions of section 4(b)(2) of the Act.

However, we specifically solicit comments on the inclusion or exclusion of these areas. In the paragraphs below, we provide a detailed analysis of exclusion of these lands under section 4(b)(2) of the Act. We have also added an Addendum entitled Land Ownership/Management and Potential Economic Impacts for Proposed Yellow-billed Cuckoo Critical Habitat to our Incremental Effects Memorandum that lays out in table form the Service's policy considerations under section 4(B)(2) of the Endangered Species Act. This Addendum was developed following the finalization of the Incremental Effects Memorandum and the information in the Incremental Effects Memorandum was used to inform the policy considerations.

#### Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense (DOD) where a national security impact might exist. In preparing this proposal, we have determined that the lands within the proposed designation of critical habitat for western yellow-billed cuckoo are not owned or managed by the Department of Defense, and, therefore, we anticipate no impact on national security. Consequently, the Secretary does not propose to exert her discretion to exclude any areas from the final designation based on impacts on national security.

#### Exclusions Based on Other Relevant Impacts



Under section 4(b)(2) of the Act, we consider any other relevant impacts in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

Land and Resource Management Plans, Conservation Plans, or Agreements Based on Conservation Partnerships

We consider a current land management or conservation plan (HCPs as well as other types) to provide adequate management or protection if it meets the following criteria:

- (1) The plan is complete and provides an equal or greater level of protection from adverse modification or destruction than that provided through a consultation under section 7 of the Act;
- (2) There is a reasonable expectation that the conservation management strategies and actions will be implemented in the foreseeable future, based on past practices, written guidance, or regulations; and
- (3) The plan provides conservation strategies and measures consistent with

currently accepted principles of conservation biology.

We believe that the following HCPs, plans, partnerships, and agreements may fulfill the above criteria, and will consider the exclusion of these Federal, tribal, and non-Federal lands covered by these plans that provide for the conservation of the western yellow-billed cuckoo. We are requesting comments on the benefits to the western yellow-billed cuckoo from these following HCPs, plans, partnerships, and agreements. However, at this time, we are not proposing the exclusion of any areas in this proposed critical habitat designation for the western yellow-billed cuckoo. We specifically solicit comments on the inclusion or exclusion of such areas and request any information on any other potential exclusions. We may consider other areas for exclusion based on public comment and information we receive and on our further review of the proposed designation and its potential impacts.

Most of the following information on HCPs, plans, partnerships, and agreements was obtained from the August 15, 2011, proposed designation of revised critical habitat for the southwestern willow flycatcher (flycatcher) (*Empidonax traillii extimus*) (76 FR 50542). The areas used by the flycatcher and western yellow-billed cuckoo overlap in several areas in the southwestern United States and management actions for the flycatcher often benefit the western yellow-billed cuckoo. These various plans describe beneficial actions for the flycatcher within the same area that we are proposing to designate as western yellow-billed cuckoo critical habitat. We will consider whether these beneficial actions for the flycatcher are appropriate for considering exclusion of a

given proposed western yellow-billed cuckoo unit from final western yellow-billed cuckoo critical habitat designation under section 4(b)(2) of the Act.

## **California**

### **South Fork Kern River Valley (Unit 4 CA-4) (Hafenfeld Ranch Conservation Easement)**

The Hafenfeld Ranch owns and manages a segment (40 ac (16 ha)) of proposed western yellow-billed cuckoo critical habitat along the South Fork Kern River within the Kern River Management Unit in Kern County, California. The Hafenfeld Ranch has developed a conservation easement and plan with the Natural Resources Conservation Service that provides management and protections for flycatcher habitat. We are evaluating whether these actions also provide benefit for the western yellow-billed cuckoo. The Hafenfeld parcel completes a continuous corridor of willow-cottonwood riparian habitat along the South Fork Kern River that connects the east and west segments of the Audubon Society's Kern River Preserve. The conservation easement and plan establishes that these lands are managed for the benefit of the flycatcher by restoring, improving, and protecting its habitat. Management activities include: (1) Limiting public access to the site, (2) winter-only grazing practices (outside of the flycatcher nesting season), (3) protection of the site from development or encroachment, (4) maintenance of the site as permanent open space that has been left predominantly in its natural vegetative state, and (5) spreading of flood waters to promote the moisture regime and wetland and riparian vegetation for the conservation of the flycatcher. Prohibitions of the easement

that would benefit the conservation of the flycatcher include: (1) Haying, mowing, or seed harvesting; (2) altering the grassland, woodland, wildlife habitat, or other natural features; (3) dumping refuse, wastes, sewage, or other debris; (4) harvesting wood products; (5) draining, dredging, channeling, filling, leveling, pumping, diking, or impounding water features or altering the existing surface water drainage or flows naturally occurring within the easement area; and (6) building or placing structures on the easement.

Based on the actions to benefit the flycatcher we will consider excluding the Hafenfeld Ranch lands within Unit 4 (40 ac (16 ha)) from final western yellow-billed cuckoo critical habitat designation under section 4(b)(2) of the Act.

#### Sprague Ranch

Sprague Ranch is an approximately 2,479-ac (1,003-ha) parcel, which includes approximately 395 ha (975 ac) of floodplain habitat located along the South Fork of the Kern River in Kern County, California. Sprague Ranch was purchased by the USACE as a result of biological opinions for the long-term operation of Lake Isabella Dam and Reservoir (Service 1996 File Nos. 1-1-96-F-27; 1-1-99-F-216; and 1-1-05-F-0067), specifically to provide habitat and conservation for the flycatcher. Many of the actions may also benefit the western yellow-billed cuckoo. During the periods of time flycatcher habitat is not available at Lake Isabella Reservoir as a result of short-term inundation from Isabella Dam operations, Sprague Ranch is expected to provide habitat for the

flycatcher. The USACE, National Audubon Society (Audubon), and California Department of Fish and Wildlife (CDFW) (formerly California Department of Fish and Game) have a joint management agreement for this property, which is important flycatcher habitat. Sprague Ranch is located immediately north and adjacent to the Kern River Preserve, which is owned and operated by Audubon, and shares a common border with the Kern River Preserve (KRP) of over 3 mi (4.8 km). Sprague Ranch contains existing riparian forest that can support and maintain nesting territories and migrating and dispersing flycatchers. Other portions of the ranch are believed to require restoration and management in order to become nesting flycatcher habitat. Activities such as nonnative vegetation control and native tree plantings are other management activities expected to occur. Sprague Ranch is currently being managed in accordance with the terms and conditions of the biological opinions specifically for the flycatcher.

Based on the anticipated benefits to the western yellow-billed cuckoo that would derive from the actions to benefit the flycatcher we will consider excluding approximately 120 ac (49 ha) in Unit 4 along the South Fork Kern River on Sprague Ranch from final western yellow-billed cuckoo critical habitat designation under section 4(b)(2) of the Act.

Owens River (Unit 5, CA-5)

*LADWP Conservation Strategy.* The LADWP owns and manages a proposed segment of western yellow-billed cuckoo critical habitat along the Owens River in Inyo

County, California. We believe that LADWP owns and manages the entire extent of 1,598 ac (647 ha) of western yellow-billed cuckoo habitat within this proposed unit. The U.S. Fish and Wildlife Service and the LADWP signed a memorandum of understanding in 2005, to implement a flycatcher conservation strategy designed to proactively manage flycatchers in the Owens Management Unit, along the Owens River from Long Valley Dam downstream to 4 mi (6 km) north of Tinemaha Reservoir. The conservation strategy addresses three elements—livestock grazing, recreational activities, and wildfires—which have the potential to adversely affect flycatcher habitat. The conservation strategy provides specific measures that: (1) Are designed to create suitable breeding habitat for the flycatcher; and (2) avoid and minimize potential adverse effects, such as the degradation or loss of habitat that may be associated with grazing activities, recreational activities, and wildland fires. Based on the actions to benefit the flycatcher, which will also benefit the western yellow-billed cuckoo, we will consider excluding 1,598 ac (647 ha) of LADWP lands from the final western yellow-billed cuckoo critical habitat designation under section 4(b)(2) of the Act. We encourage any public comments in relation to this consideration.

#### Prado Basin (Unit 6, CA-6)

We are considering excluding under section 4(b)(2) of the Act areas covered by the Western Riverside MSHCP from the final designation of critical habitat for the western yellow-billed cuckoo. We are considering to do so based on the protections described below (see “Exclusions Based on Other Relevant Impacts” section) and per the

provisions laid out in the MSHCP's implementing agreement, to the extent consistent with the requirements of section 4(b)(2) of the Act. We are considering excluding all of proposed Unit 6 (4,406 ac (1,784 ha)) from the final designation.

#### Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside MSHCP)

The Western Riverside MSHCP is a comprehensive, multi-jurisdictional plan encompassing approximately 1,260,000 ac (510,000 ha) of the Riverside County west of the San Jacinto Mountains (County of Riverside 2003a, p. 1-1). The Western Riverside MSHCP is a subregional plan under the State of California's Natural Community Conservation Planning Act (NCCP) and was developed in cooperation with the CDFW (County of Riverside 2003a, p. 1-1). The Western Riverside MSHCP is a multi-species conservation program designed to minimize and mitigate the effects of expected habitat loss and associated incidental take of 146 listed and nonlisted "covered species," including the western yellow-billed cuckoo (County of Riverside 2003d, pp. B-555 to B-572). A section 10(a)(1)(B) permit for the Western Riverside MSHCP was issued to 22 permittees on June 22, 2004, for a period of 75 years (Service 2004b, p. 1). There are now 27 permittees under the Western Riverside MSHCP.

When fully implemented, the Western Riverside MSHCP will conserve approximately 153,000 ac (61,917 ha) of new conservation lands (Additional Reserve Lands) in addition to the approximately 347,000 ac (140,400 ha) of pre-existing natural

and open space areas (known in the plan as “Public/Quasi-Public” (PQP) lands) (County of Riverside 2003a, pp. 1-16 to 1-17). The PQP lands include those under the ownership of public or quasi-public agencies, primarily the USFS and BLM, as well as the USACE, plus permittee-owned or controlled open-space areas managed by the State of California and the County of Riverside. Lands owned by the Orange County Water District (OCWD) within the Prado Basin are also considered PQP lands under the Western Riverside MSHCP. The Plan’s “Additional Reserve Lands” are not fully mapped or precisely delineated (that is, they are not “hard-lined”); rather, they are textual descriptions of habitat necessary to meet the conservation goals for all covered species within the boundaries of the approximately 500,000-ac (202,343-ha) “MSHCP Conservation Area” and are determined as implementation of the HCP occurs.

Under the Western Riverside MSHCP, the Prado Basin is considered “core habitat” and a “linkage” area (County of Riverside 2003b, p. 3-31; Service 2004a, p. 49). As discussed in the Western Riverside MSHCP (County of Riverside 2003c, pp. 9-87 to 9-88), the HCP was designed to preserve “core areas” of the western yellow-billed cuckoo, including the Prado Basin, which is considered an “important core area” for the species.

We evaluated the effects of the Western Riverside MSHCP on the western yellow-billed cuckoo and its habitat within the plan boundaries as part of the inter-Service section 7 consultation conducted for the MSHCP. As summarized in the biological opinion (Service 2004a, pp. 231–232), we estimated 4,613 ac (1,867 ha) of



modeled habitat within the Plan Area. Only 77 ac (31 ha), or 2 percent, of this modeled habitat is outside the MSHCP Conservation Area. To offset potential impacts to the western yellow-billed cuckoo in the Plan Area, 4,250 ac (1,720 ha), or 92 percent, of western yellow-billed cuckoo modeled habitat will remain within PQP Lands. An additional 287 ac (116 ha), or 6 percent, of modeled habitat will be conserved in Additional Reserve Lands with management prescriptions that will benefit the western yellow-billed cuckoo. In total, 4,537 ac (1,836 ha), or 98 percent, of the modeled habitat will be conserved or remain in the Plan Area.

Additionally, the OCWD, which funds and maintains its lands in Prado Basin, has set aside 124 acres of riparian habitat and has funded a conservation program. The conservation program was established primarily to benefit the endangered least Bell's vireo (*Vireo bellii pusillus*), but it will also benefit other species dependent on riparian vegetation, including the western yellow-billed cuckoo. The program includes cowbird trapping and removal of giant reed along the Santa Ana River (Service 2004a, p. 59).

We determined that implementing the Western Riverside MSHCP plan would not place the western yellow-billed cuckoo at risk of extinction (Service 2004a, p. 235). In addition, we acknowledged in section 14.10 of the implementing agreement (IA) for the Western Riverside MSHCP that the plan provides a comprehensive, habitat-based approach to the protection of covered species, including the western yellow-billed cuckoo, by focusing on lands essential for the long-term conservation of the covered species and appropriate management for those lands (Western Riverside County Regional

Conservation Authority (WRCRCA) *et al.* 2003, p. 51). The most significant threats to the species are the destruction and modification of its habitat, habitat rarity, and small isolated populations. The Western Riverside MSHCP helps to address these threats through a regional planning effort, and outlines species-specific objectives and criteria for the conservation of western yellow-billed cuckoo. As discussed above, we are considering excluding lands within the Plan Areas for the Western Riverside MSHCP. As noted in the **Information Requested** section, we are soliciting comments on whether to exclude areas covered by HCPs.

## **Arizona**

Alamo Lake (Unit 10, AZ-2), Alamo Lake State Wildlife Area (AWA).

The Alamo Lake State Wildlife Area (AWA) in La Paz and Mohave Counties, Arizona, was created under provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*), Public Land Order 492 (PLO 492), and the General Plan agreement between the Secretary of the Army, Secretary of the Interior, and Director of Arizona Game and Fish, signed January 19, 1968 (Arizona Game and Fish Department-Arizona State Parks 1997). A lease agreement between the Arizona Game and Fish Department Commission and the USACE was signed in 1970, establishing the AWA for fish and wildlife conservation and management purposes (Arizona Game and Fish Department-Arizona State Parks 1997). The present lease area encompasses approximately 9,140 ha (22,586 ac).

Public input was solicited and addressed in development of the AWA Management Plan and the NEPA review process (Arizona Game and Fish Department-Arizona State Parks 1997). The corresponding Alamo Wildlife Area Property Operational Management Plan addressing the operations of the property, together with the budget, is updated as needed to reflect the changes in operational management (Arizona Game and Fish Department 2012).

Proposed western yellow-billed cuckoo critical habitat occurs along the Big Sandy, Santa Maria, and Bill Williams Rivers, which make up the upper portion of Alamo Lake. The AWA Management Plan describes the unique riparian, wetland, and aquatic aspects of the area for a variety of species, specifically targeting the flycatcher for management and including the western yellow-billed cuckoo as a species of wildlife concern. Two of the specific resources that are directed toward the habitat needs of the flycatcher and the western yellow-billed cuckoo: (1) Maintain and enhance aquatic and riparian habitats to benefit wildlife; and (2) restore, manage, and enhance habitats for wildlife of special concern. Large Fremont cottonwood and Goodding's willow forests, mesquite bosque, and small areas of wetland currently exist along the Big Sandy, Santa Maria, and upper Bill Williams Rivers. Increasing and improving these habitats will benefit riparian- and wetland-dependent species (Arizona Game and Fish Department 2012, p. 4-6). The objective for maintaining and enhancing riparian habitat includes (a) Maintaining a reservoir level sufficient to ensure suitable soil moisture conditions in the mixed riparian forest, and (b) managing burros and eliminating trespass cattle to ensure that browsing does not harm existing habitat or impair recruitment of replacement

vegetation. Livestock grazing is excluded from the riparian areas on the upper end of Alamo Lake and the lower portions of the Santa Maria and Big Sandy Rivers. Burro management objectives are to monitor and limit use of riparian vegetation such that annual bark stripping of live trees does not exceed 3 percent in any of the key monitoring areas (Arizona Game and Fish Department 2012, p. 10). Fencing may be needed to exclude unauthorized livestock and feral burros, exclude elk, control OHV access, and better manage authorized livestock (Arizona Game and Fish Department 2012, pp. 10-12). We will consider excluding 1,840 ac (745 ha) of the Bill Williams, Santa Maria, and Big Sandy Rivers within the Alamo Lake State Wildlife Area from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Colorado River; Bill Williams River; Lake Meade; and Lower Gila River (Unit 7: CA/AZ-1; Unit 8: CA/AZ-2; Unit 9: AZ-1; Unit 11: AZ-3; and Unit 12: AZ-4)

Lower Colorado River Multi-Species Conservation Plan (LCR MSCP). The Lower Colorado River Multi-Species Conservation Program (2004, pp. 1-506) was developed for areas along the lower Colorado River along the borders of Arizona, California, and Nevada from the conservation space of Lake Mead to Mexico, in the Counties of La Paz, Mohave, and Yuma in Arizona; Imperial, Riverside, and San Bernardino Counties in California; and Clark County in Nevada. The LCR MSCP primarily covers activities associated with water storage, delivery, diversion, and hydroelectric production. The record of decision was signed by the Secretary of the Interior on April 2, 2005. Discussions began on the development of this HCP in 1994,

but an important catalyst was a 1997 jeopardy biological opinion for the flycatcher issued to Reclamation for lower Colorado River operations. The Federal agencies involved in the LCR MSCP include Reclamation, Bureau of Indian Affairs (BIA), NPS, BLM, Western Area Power Administration, and the U.S. Fish and Wildlife Service.

The LCR MSCP planning area primarily surrounds proposed western yellow-billed cuckoo critical habitat along the lower Colorado River from Lake Mead to the southerly International Border. Portions of the Colorado River, Lake Mead, Virgin River, and Muddy River in Arizona, Utah, and Nevada, are included where they surround Lake Mead (including the conservation space of Lake Mead, which extends up the Colorado River to Separation Canyon). Also, a portion of the Bill Williams River at the Colorado River confluence at Lake Havasu occurs within the LCR MSCP planning area. The LCR MSCP permittees will create and maintain 4,050 ac (1,639 ha) of western yellow-billed cuckoo habitat, reduce the risk of loss of created habitat to wildfire, replace created habitat affected by wildfire, and avoid and minimize operational and management impacts to western yellow-billed cuckoos over the 50-year life of the permit (2005 to 2055) (Lower Colorado River Multi-Species Conservation Program 2004, pp. 5-30–5-36, Table 5-10, 5-58–5-60). Additional research, management, monitoring, and protection of western yellow-billed cuckoos will occur. In addition to western yellow-billed cuckoo habitat creation and subsequent management, the LCR MSCP will provide funds to ensure existing western yellow-billed cuckoo habitat is maintained. Western yellow-billed cuckoo management associated with the LCR MSCP is conducted in conjunction with management occurring on the National Wildlife Refuges (Bill Williams, Havasu,

Cibola, and Imperial) and Tribal lands (Hualapai, Fort Mohave, Chemehuevi, Colorado River, and Quechan Tribes) along the LCR. We will consider excluding 64,652 ac (26,175 ha) of land including portions of the Colorado River from the uppermost storage space of Lake Mead downstream to the southerly International Border and portions of tributaries (Virgin, Muddy, and Bill Williams Rivers) to the Colorado River that may occur within the LCR MSCP planning area from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Fort Mojave Indian Tribe (Unit 8, CA/AZ-2). Fort Mojave Indian Tribal lands contain a proposed Colorado River segment of western yellow-billed cuckoo critical habitat in the above Lake Havasu in Mohave County, Arizona. The Fort Mojave Tribe has finalized a flycatcher management plan (SWFMP), compatible with western yellow-billed cuckoo management (Fort Mojave Indian Tribe 2005, pp. 1-24). The Fort Mojave Tribe's SWFMP describes that within the Tribe's budgetary constraints, they commit to management that will sustain the current value of saltcedar, willow, and cottonwood vegetation that meets moist soil conditions necessary to maintain flycatcher habitat; monitoring to determine flycatcher presence and vegetation status in cooperation with the Service; and wildfire response and law enforcement to protect suitable habitats. The Fort Mojave Indian Tribe may also work in conjunction with the LCR MSCP on additional riparian management (Fort Mojave Indian Tribe 2005, pp. 1-24). We will consider excluding the Colorado River within Fort Mojave Tribal land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Colorado River Indian Reservation (Unit 7, CA/AZ-1). The Colorado River Indian Tribal lands (CRIT) contain a proposed Colorado River segment of western yellow-billed cuckoo habitat in La Paz County, Arizona. The Colorado River Indian Tribes have finalized a flycatcher management plan compatible with western yellow-billed cuckoo management (Colorado River Indian Tribes 2005, pp. 1–48). The CRIT’s SWFMP describes a commitment to conduct a variety of habitat management actions. The SWFMP also identifies the assessment, identification, and protection of flycatcher migration habitat (Colorado River Indian Tribes 2005, pp. 1–48). The SWFMP identifies protecting breeding habitat with the Ahakhav Tribal Preserve and in any areas established for flycatchers with the LCR MSCP. Seasonal closures of occupied flycatcher habitat during the breeding season may be necessary and established by the CRIT. Protection of habitat from fire is established in the SWFMP, as well as protections from other possible stressors such as overgrazing, recreation, and development (Colorado River Indian Tribes 2005, pp. 1-48). The CRIT may also work in conjunction with the LCR MSCP on additional riparian management. We will consider excluding the Colorado River within CRIT land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Fort Yuma Indian Reservation (Unit 7, CA/AZ-1). The Quechan Tribal lands contain a proposed Colorado River segment of western yellow-billed cuckoo critical near the City of Yuma in Yuma County, Arizona. The Quechan Tribe has completed a SWFMP that is compatible with western yellow-billed cuckoo management (Quechan Indian Tribe 2005, pp. 1–30). The Quechan Tribe’s SWFMP describes a commitment to

conduct a variety of habitat management actions. The Tribe will manage riparian tamarisk that is intermixed with cottonwood, willow, mesquite, and arrowweed (*Pluchea sericea*) to maximize potential value for nesting flycatchers (Quechan Indian Tribe 2005, pp. 1–30). Any permanent land use changes for recreation or other reasons will consider and support flycatcher needs, as long as consistent with Tribal cultural and economic needs. The Tribe will consult with the Service to develop and design plans that minimize impacts to flycatcher habitat. The Tribe will establish collaborative relationships with the Service to benefit the flycatcher, including monitoring for flycatcher presence and habitat condition, within the constraints of available funds to the Tribe. This action is anticipated to provide benefits to the western yellow-billed cuckoo. The Quechan Tribe may also work in conjunction with the LCR MSCP on additional riparian management. We will consider excluding the Colorado River within Quechan Tribal land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Cocopah Tribe of Arizona (Unit 7, CA/AZ-1). The Cocopah Tribal lands, located 13 mi (21 km) south of Yuma, in Yuma County, Arizona, contain proposed western yellow-billed cuckoo critical habitat along the lower Colorado River. We anticipate coordinating with the Cocopah Tribe regarding development of a riparian plan compatible with western yellow-billed cuckoo management. The Cocopah Tribe may also work in conjunction with the LCR MSCP on additional riparian management. We will consider excluding the Cocopah Tribe of Arizona land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.



Based on these conservation plans, we will consider excluding 27,215 ac (11,013 ha) of Tribal land in the two Colorado River units.

#### Gila River Indian Community (Unit 15: AZ-7 Gila and Salt Rivers)

The northern boundary of the Gila River Indian Community lands adjacent to the southwestern boundary of Phoenix, in Maricopa County, Arizona, contain proposed western yellow-billed cuckoo critical habitat along the Salt and Gila rivers. We anticipate coordinating with the Gila River Indian Community regarding development of a riparian plan compatible with western yellow-billed cuckoo management. We will consider excluding 868 ac (351 ha) of Tribal land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

#### Horseshoe Dam (Unit 21: AZ-13) and Lower Verde River (Unit 42: AZ-34)

#### Horseshoe and Bartlett Dam Habitat Conservation Plan (HCP)

In June 2008, the Service issued an incidental take permit to the Salt River Project (SRP) for 16 species that inhabit Horseshoe and Bartlett Reservoirs and the Verde River above and below the two dams in Gila and Maricopa Counties (Salt River Project 2008, p. 6). The western yellow-billed cuckoo and flycatcher are two of the covered species in the permit. Critical habitat on the Verde River is proposed within the water storage space

and upstream of Horseshoe Reservoir and downstream of Bartlett Lake. The area covered by the permit for the western yellow-billed cuckoo and flycatcher includes Horseshoe Reservoir up to an elevation of 2,026 ft (618 m) and Bartlett up to an elevation of 1,748 ft (533 m), (Salt River Project 2008, p. ES-1). The water storage space within Horseshoe Reservoir is the primary area where impacts to the western yellow-billed cuckoos and flycatchers are anticipated to occur through periodic inundation and drying of habitat (Salt River Project 2008, p. 3). Water storage and periodic inundation of western yellow-billed cuckoo and flycatcher habitat would likely result in delayed or lost breeding attempts, decreased productivity and survivorship of dispersing adults in search of suitable breeding habitat, and decreased productivity of adults that attempt to breed at Horseshoe Reservoir. The 50-year Horseshoe and Bartlett Dam HCP provides measures to minimize and mitigate incidental take while allowing the continued operation of the two reservoirs (Salt River Project 2011a, p. 5). These goals will be achieved with the following measures: (1) Managing water levels in Horseshoe Reservoir to the extent practicable to benefit or reduce impacts to the covered species; and (2) acquiring and managing flycatcher and western yellow-billed cuckoo habitat along rivers in central Arizona to provide a diversity of geographic locations with habitat like Horseshoe Reservoir (Salt River Project 2008, p. ES-4). Mitigation efforts include operation of Horseshoe Reservoir to support tall, dense vegetation at the upper end of the reservoir and to make riparian habitat available earlier in the nesting season (Salt River Project 2011a, p. 5). In addition, the HCP obligates the SRP to monitor western yellow-billed cuckoos, flycatchers, and habitat at Horseshoe Reservoir (Salt River Project 2011a, p. 8) and mitigation properties. The SRP must acquire and manage in perpetuity 200 ac (81

ha) of riparian habitat by fee title or conservation easements (Salt River Project 2011a, p. 5). The SRP has acquired a conservation easement for 150 ac (60 ha) on the Gila River near Fort Thomas and is working on acquiring an additional 50 ac (20 ha) (Salt River Project 2011a, p. 5). The SRP provides water from Horseshoe and Bartlett Reservoirs directly to various beneficiaries of these storage facilities for irrigation and other uses (Salt River Project 2008, pp. 11-22). Water from Horseshoe, Bartlett, and the SRP's other reservoirs is provided directly by the SRP to shareholder lands for irrigation and other uses, and is delivered to the cities of Avondale, Chandler, Gilbert, Glendale, Mesa, Peoria, Phoenix, Scottsdale, Tempe, and Tolleson for municipal use on shareholder lands. Water deliveries are also made under specific water rights in Horseshoe and Bartlett Reservoirs held by the City of Phoenix, Salt River Pima Maricopa Indian Community, and Fort McDowell Yavapai Nation. In addition, water is delivered from the SRP reservoir system to the cities, Gila River Indian Community, Buckeye Irrigation Company, RWCD, and others in satisfaction of their independent water rights. Finally, exchange agreements between a number of entities and the SRP pursuant to State and Federal law are facilitated by stored water from Horseshoe and Bartlett Reservoirs. We will consider excluding 626 ac (253 ha) in the water storage area of Horseshoe Reservoir and the 1,079 ac (437 ha) of the Lower Verde River from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Roosevelt Lake (Unit 22: AZ-14, Tonto Creek, and Unit 37: AZ-29, Salt River)

In February 2003, the Service issued an incidental take permit to the SRP for four riparian bird species, including the western yellow-billed cuckoo and flycatcher for 50 years (Salt River Project 2011b, p. 1). The Tonto Creek and the Salt River confluences with Roosevelt Lake are proposed as western yellow-billed cuckoo critical habitat. The activity covered by the permit is the continued operation by the SRP of Roosevelt Dam and Lake in Gila and Maricopa Counties, Arizona, up to an elevation of 2,151 ft (656 m) (Salt River Project 2002, ES-1). The HCP specifies the following measures to minimize and mitigate incidental take of the four species: Creating and managing riparian habitat at Roosevelt Lake; and acquiring and managing riparian habitat in river basins in central Arizona that the four target bird species are expected to occupy (Salt River Project 2002, ES-4). The HCP commits the SRP to acquire 2,250 ac (911 ha) credits, including acquisition and management of at least 1,500 ac (607 ha) of riparian habitat by fee title or conservation easement off-site on the San Pedro, Verde, and Gila rivers and protection of up to an additional 750 ac (304 ha). The SRP has exceeded this obligation, accruing 2,591 ac (1,049 ha) credits (Salt River Project 2011b, p. 17). The SRP monitors vegetation at Roosevelt Lake to ensure that adaptive management thresholds or permit limits are not exceeded (Salt River Project 2011b, p. 6). Because flycatchers and western yellow-billed cuckoos rely on similar riparian habitat, most of the mitigation measures serve both species.

Western yellow-billed cuckoo and flycatcher habitat at Roosevelt Lake varies depending on how and when the lake recedes as a result of water in-flow and subsequent storage capacity and delivery needs. Even in the expected high-water years, some

flycatcher and western yellow-billed cuckoo habitat would persist at Roosevelt Lake. Measures in the HCP to protect habitat at Roosevelt Lake include funding a USFS employee to patrol and improve protection of flycatcher habitat in the Roosevelt lakebed from adverse activities such as fire ignition from human neglect, improper vehicle use, etc. (Salt River Project 2011b, p. 13). The SRP also developed habitat near Roosevelt Lake at offsite Rock House Farm Site to serve as a potential refugium when Roosevelt Lake is near capacity (Salt River Project 2011, p. 15). The SRP monitors habitat conditions, flycatchers, and western yellow-billed cuckoos at Roosevelt Lake and at offsite mitigation properties (Salt River Project 2011, pp. 19-20). We will consider excluding the water storage area of Roosevelt Lake including 3,155 ac (1,277 ha) of Unit AZ-14 and 2,469 ac (1,000 ha) of Unit AZ-29 from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Pima County Multi-Species Conservation Plan (Unit 28: AZ-20, Lower San Pedro River and Gila River; Unit 30: AZ-22, Peritas Wash; Unit 31: AZ-23, Arivaca Wash and San Luis Wash; Unit 33: AZ-25, Upper Cienega Creek; Unit 38: AZ-30, Lower Cienega Creek; and Unit 45: AZ-37, Florida Wash).

Under the draft Multi-Species Conservation Plan, Pima County will avoid, minimize, and mitigate impacts to 44 species and their habitat within the Permit Area (a subset of Pima County) during the 30-year section 10(a)(1)(B) permit period (Pima County 2011a, p. xi). The primary covered activities are maintenance and construction activities and certain development activities of the private sector. Pima County

anticipates providing approximately 112,000 ac (45,325 ha) of mitigation for approximately 36,000 ac (14,568 ha) of disturbance resulting from covered activities (Pima County 2011a, p. xi). The plan will conserve and manage western yellow-billed cuckoos by: (1) Implementing the Pima County Riparian Protection Ordinance to minimize habitat loss; and (2) protecting water rights at Cienega Creek Natural Preserve and Buehman Canyon to maintain and restore habitat (Pima County 2011b, p. A-80). Proposed critical habitat within the jurisdiction of Pima County includes parts of Cienega Creek, Florida Wash, Penitas Wash, and the San Pedro River (Pima County 2011a, p. 14). Pima County will conduct western yellow-billed cuckoo surveys, although the frequency and locations have yet to be determined. Approximately 8,962 ac (3,626 ha) are proposed as mitigation for the projected loss of 74 ac (30 ha) of western yellow-billed cuckoo habitat; however, these 74 ac (30 ha) are not proposed as critical habitat (Pima County 2011b, p. A-80). Additional impacts within western yellow-billed cuckoo habitat resulting from the covered activities may emerge over the 30-year permit period and will be mitigated accordingly. Pima County will develop a riparian and aquatic species management that will include conservation actions to benefit covered species (Pima County 2011a, p. 51). The amount of mitigation credit for implementation of these conservation actions will be negotiated with the Service on a case-by-case basis (Pima County 2011a, p. 51). We are considering excluding 37,812 ac (15,308 ha) in these units from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Yavapai-Apache Nation (Unit 17: AZ-9, Upper Verde River; Unit 19: AZ-11, Beaver Creek and tributaries; and Unit 20: AZ-12, Lower Verde River and West Clear Creek).

The Yavapai-Apache Nation contains Verde River segments of proposed western yellow-billed cuckoo critical habitat in Yavapai County, Arizona. The small parcels total 638 acres and are located near Clarkdale, Camp Verde, Middle Verde, Rimrock, and the I-17 interchange for Montezuma Castle National Monument (Yavapai-Apache Nation 2005, p. 6). The Yavapai-Apache Nation has completed a SWFMP that is compatible with western yellow-billed cuckoo management (Yavapai-Apache Nation 2005, pp. 1-15). The Yavapai-Apache Nation's SWFMP addresses and presents assurances for flycatcher habitat conservation. The Yavapai-Apache Nation will, through zoning, Tribal ordinances and code requirements, and measures identified in the flycatcher recovery plan, take all practicable steps to protect known flycatcher habitat located along the Verde River (Yavapai-Apache Nation 2005, p. 14). The Yavapai-Apache Nation will take all reasonable measures to assure that no net habitat loss or permanent modification of flycatcher habitat will result from recreational and road construction activities, or habitat restoration activities, and will take all reasonable steps to coordinate with the Service so that flycatcher habitat is protected. Within funding limitations and under confidentiality guidelines established by the Yavapai-Apache Nation, they will cooperate with the Service to monitor and survey habitat for breeding and migrating flycatchers, conduct research, and perform habitat restoration, or other beneficial flycatcher management activities. Because flycatchers and western yellow-billed cuckoos rely on similar riparian habitat, most of the mitigation measures serve both species. We will

consider excluding the Verde River segments totaling 46 ac (18 ha) within the Yavapai-Apache Nation from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

San Carlos Reservation (Unit 28: AZ-20, Lower San Pedro River and Gila River; Unit 36: AZ-28, Gila River 1).

The San Carlos Apache Tribal lands contain proposed western yellow-billed cuckoo critical habitat within the conservation space of San Carlos Lake and the Gila River upstream from San Carlos Lake, in Gila County, Arizona. The San Carlos Apache Tribe has finalized a SWFMP that is compatible with western yellow-billed cuckoo management (San Carlos Apache Tribe 2005, pp. 1–65). Implementation of the San Carlos Apache Tribe’s SWFMP will protect all known flycatcher habitat on San Carlos Tribal Land and assure no net habitat loss or permanent modification will result (San Carlos Apache Tribe 2005, p. 36). All habitat restoration activities (whether to rehabilitate or restore native plants) will be conducted under reasonable coordination with the Service. All reasonable measures will be taken to ensure that recreational activities do not result in a net habitat loss or permanent modification. All reasonable measures will be taken to conduct livestock grazing activities under the guidelines established in the Recovery Plan for the flycatcher. Within funding limitations and under confidentiality guidelines established by the Tribe, the Tribe will cooperate with the Service to monitor and survey habitat for breeding and migrating flycatchers, conduct research, and perform habitat restoration, or other beneficial flycatcher management



activities (San Carlos Apache Tribe 2005, pp. 35–36, 45–46). Because flycatchers and western yellow-billed cuckoos rely on similar riparian habitat, most of the mitigation measures serve both species. We will consider excluding 10,912 ac (4,418 ha) of San Carlos Apache Tribal land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

## **New Mexico**

San Juan River; San Juan County, New Mexico (Unit 46: NM-1)

### **Tribal Management Plans and Partnerships—Navajo Nation**

The Navajo Nation contains a river segment of the proposed San Juan River 1 Unit in San Juan County, New Mexico. We will coordinate with these tribes and examine what western yellow-billed cuckoo conservation actions, management plans, and other commitments occur on these lands for potential exclusion of 1,041 ac (421 ha) of Navajo Nation land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Upper Rio Grande (Unit 50: NM-6) and Middle Rio Grande (Unit 51: NM-7)

*Tribal Management Plans and Partnerships—Santa Clara, San Juan (Ohkay Owingue), and the San Ildefonso Pueblos.* The Santa Clara Pueblo and the San Juan Pueblo (Ohkay Owingue) contain proposed western yellow-billed cuckoo critical habitat

along the Rio Grande within the Upper Rio Grande Management Unit in Rio Arriba County, New Mexico. The San Ildefonso Pueblo contains proposed western yellow-billed cuckoo critical habitat along the Rio Grande within the Upper Rio Grande Management Unit in Santa Fe County, New Mexico.

The Santa Clara Pueblo, the San Juan Pueblo (Ohkay Owingue), and the San Ildefonso Pueblo have conducted a variety of voluntary measures, restoration projects, and management actions to conserve the western yellow-billed cuckoo and its habitat on their lands. These Pueblos have made a commitment to the Service to develop an integrated resources management plan to address multiuse, enhancement, and management of their natural resources. The pueblos have implemented fuel reduction of flammable exotic riparian vegetation and native tree restoration projects in the riparian area since 2001, carefully progressing in incremental stages to reduce the overall effects to wildlife. We will consider excluding the Santa Clara Pueblo, the San Juan Pueblo (Ohkay Owingue), and the San Ildefonso Pueblo lands totaling 1,173 ac (475 ha) from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

Middle Rio Grande (Unit 52: NM-8)

*Tribal Management Plans and Partnerships—Cochiti, Santo Domingo, San Felipe, Sandia, and Santa Ana Pueblos.* The Cochiti Pueblo, Santo Domingo Pueblo, San Felipe Pueblo, Sandia Pueblo, and Santa Ana Pueblo contain proposed western

yellow-billed cuckoo critical habitat along the Rio Grande within the Middle Rio Grande Management Unit in Sandoval County, New Mexico. The Isleta Pueblo contains proposed western yellow-billed cuckoo critical habitat along the Rio Grande within the Middle Rio Grande Management Unit in Bernalillo County, New Mexico.

The Cochiti Pueblo, Santo Domingo Pueblo, San Felipe Pueblo, Sandia Pueblo, Santa Ana Pueblo, and Isleta Pueblo have conducted a variety of voluntary measures, restoration projects, and management actions to conserve the western yellow-billed cuckoo and its habitat on their lands. Cochiti Pueblo, Santo Domingo Pueblo, San Felipe Pueblo, Sandia Pueblo, Santa Ana Pueblo, and Isleta Pueblo made a commitment to the Service to develop an integrated resources management plan to address multiuse, enhancement, and management of their natural resources. The pueblos have implemented fuel reduction of flammable exotic riparian vegetation and native tree restoration projects in the riparian area since 2001, carefully progressing in incremental stages to reduce the overall effects to wildlife. We will consider excluding the Cochiti Pueblo, Santo Domingo Pueblo, San Felipe Pueblo, Sandia Pueblo, Santa Ana Pueblo, and Isleta Pueblo lands totaling 9,509 ac (3,850 ha) from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

#### U-Bar Ranch (Unit 48: NM-4)

The U-Bar Ranch (Ranch) near Cliff, in Grant County New Mexico, in the Upper Gila Management Area is owned by Pacific Western Land Company (PWLC), a subsidiary of the Freeport-McMoRan Corporation (formerly named Phelps Dodge Corporation)(FMC).

Through their efforts and their long-time lessee, FMC has demonstrated a commitment to management practices on the Ranch that have conserved and benefited the western yellow-billed cuckoo population in that area over the past decade. In addition, FMC had privately funded scientific research at and in the vicinity of the Ranch in order to develop data that has contributed to the understanding of habitat selection, distribution, prey base, and threats to the southwestern willow flycatcher. The riparian habitat also has a large number of nesting western yellow-billed cuckoos. Considering the past and ongoing efforts of management and research to benefit the southwestern willow flycatcher, western yellow-billed cuckoo, and riparian habitat, done in coordination and cooperation with the Service, we are considering excluding areas of the U-Bar Ranch from the final designation of critical habitat.

The U-Bar Ranch utilizes a management plan on its pastures within the Gila Valley that are north of the Highway 180 West Bridge and south of the boundary of the Gila National Forest. Eight pastures that incorporate approximately 1,372 ha (3,390 ac) are managed with a plan that is adapted annually for operation of livestock and farming enterprises. The management consists of a multifaceted and highly flexible rest-rotation system utilizing both native forage and irrigated fields. The Ranch's numerous pastures allow a relatively dynamic rotation system that is modified based upon current conditions. Grazing use of river bottom pastures is monitored by daily visual inspections. Use of these pastures is limited to ensure that forage utilization levels are moderate and over-use does not occur. In addition, the riparian areas are monitored regularly, and riparian vegetation is allowed to propagate along the river as well as in irrigation ditches.

Some specific management practices, varying in different pastures, which relate to the southwestern willow flycatcher and western yellow-billed cuckoo and their habitat are: (1) Grazing is limited to November through April to avoid negative impacts during migration and nesting season; (2) animal units are adjusted to protect and maintain the riparian vegetation; (3) the irrigation ditches are maintained, along with the vegetation; (4) restoration efforts follow flood events that destroy habitat; and (5) herbicide and pesticides are only used in rare circumstances and are not used during breeding season. These flexible and adaptive management practices have resulted in the expansion, protection, and successful continuance of a large western yellow-billed cuckoo population in the area.

In 1995, active restoration followed the flooding destruction of the Bennett Farm fields in the 162 ha (400 ac) River Pasture. The Bennett Restoration Project is a series of artificially created, flooded marshy areas located between irrigated and dry-land pastures and the river. The Bennett Restoration Project is a mosaic of vegetation in successional stages with dense patches and lines of young willows and cottonwoods occurring in manmade oxbows. The oxbows occur outside of the active flood channel behind a levee. Water is continuously present and the project has become a marshy habitat.

A significant feature of this riparian area is the amount of water it receives from adjacent irrigated fields. The Ranch has rehydrated ditches and no longer follows past land-use practices, which involved active clearing of woody vegetation from ditch banks. Besides land management practices, PWLC, and the U-Bar Ranch have supported annual

southwestern willow flycatcher surveys, where western yellow-billed cuckoo detections are recorded and research in the Gila valley since 1994. Surveyors are trained and permitted in coordination with the Service and survey results are submitted to the Service in annual reports. Southwestern willow flycatcher research on the Ranch has included: nest monitoring (sites, substrate, and success), diet, microhabitat use, climatic influences on breeding, cowbird parasitism, and distribution and characteristics of territories. Permits for studies are coordinated with the Service and reports are submitted to us for review and comments. The Service will continue to work with the U-Bar Ranch to include the western yellow-billed cuckoo in their existing management plan and research activities. Their current research provides information to apply to grazing and land management. We will consider excluding the areas identified as critical habitat on the U-Bar Ranch from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

## **Idaho**

Fort Hall Indian Reservation (Unit 69 – Snake River 1 (ID-1)); Tribal Management Plans and Partnerships.

The Fort Hall Indian Reservation contains a portion of the Snake River 1 Unit in Bannock and Bingham Counties, Idaho. We have met with staff from the Shoshone-Bannock Tribes and discussed their existing and proposed conservation actions and management plans, which also benefit the western yellow-billed cuckoo, for the area

proposed for designation as critical habitat. We will continue to coordinate with the Tribes on these management plans for potential exclusion of 3,424 ac (1,312 ha) of Fort Hall Indian Reservation land from the final designation of western yellow-billed cuckoo critical habitat under section 4(b)(2) of the Act.

## **Colorado**

Rio Grande 3 (Unit 59: CO-6) and Conejos River (Unit 60: CO-7); Partnerships, Conservation Plans, or Conservation Easements on Private Lands

### **San Luis Valley Regional Habitat Conservation Plan**

We are considering excluding critical habitat in the San Luis Valley, Colorado, based on the San Luis Valley Regional HCP, as discussed below. Two critical habitat units are proposed in the San Luis Valley: one on the Rio Grande (Unit 59; CO-6) and one that occurs on both the Conejos River and Rio San Antonio (Unit 60; CO-7). The San Luis Valley Regional HCP was finalized in November 2012. None of the other six proposed critical habitat units in Colorado are being considered for exclusion because there are no HCPs or other management plans in place or under development that cover those critical habitat units.

The species covered in the HCP are the western yellow-billed cuckoo and the flycatcher. The HCP covers nearly 250 mi (403 km) and 2.9 million ac (1.17 million ha),

a portion of which is habitat for the western yellow-billed cuckoo, and extends well beyond the stream segments on the Rio Grande, Conejos River, and Rio San Antonio that are proposed as critical habitat. Approximately 10,000 ac (4,047 ha) out of the 15,100 ac (6,111 ha) of riparian habitat in the HCP plan area are cottonwood-dominated. However, the majority of impacted woody riparian habitat will likely be willows. Yellow-billed cuckoos can use willows and other shrubs for foraging and nesting so impacts to western yellow-billed cuckoos can still occur, especially if cottonwoods are nearby or constitute the overstory.

The HCP covers routine agriculture activities (grazing, fence construction and maintenance, ditch clearing and maintenance, water facility maintenance, new small-scale water facility construction, and water management and administration), small community infrastructure activities (vegetation removal from floodways, levee construction and maintenance, sediment removal, infrastructure construction and maintenance, and road and bridge maintenance), and riparian conservation and restoration activities (channel shaping and stabilization, habitat creation and restoration, weed management, and wetland creation and management). Large commercial or residential developments, large water development projects, sanitation or industrial water impoundments, new highway construction, and projects requiring a Federal permit are not covered by the HCP.

The HCP permittees include the Rio Grande Water Conservation District (District); Alamosa, Conejos, Costilla, Rio Grande, Mineral and Saguache Counties; the



municipalities of Alamosa, Del Norte, Monte Vista, and South Fork; and the State of Colorado Department of Natural Resources. The District has committed to be the administrator of the HCP. The 9-year length of commitment to the HCP process by the permittees demonstrates their willingness to proceed with this new HCP and the likelihood of implementation of the measures and strategies contained therein.

There are an estimated 304 ac (123 ha) of woody riparian habitat impacted by the HCP's covered activities that will be mitigated at about a 1:1 ratio by the applicants. Mitigation will be in the form of conservation easements, habitat restoration and enhancements, and management agreements. The majority of covered activities are expected to impact narrow or otherwise marginal habitat for the western yellow-billed cuckoo. Consequently, mitigation measures will likely conserve, restore, or enhance habitat, resulting in an increase of higher quality habitat over impacted habitat. Both compliance and effectiveness monitoring are built into the HCP. Valley-wide habitat monitoring, as well as parcel-specific habitat monitoring and species monitoring, will be conducted and used to determine if management needs to be adapted to successfully mitigate covered activities and maintain habitat into the future.

We will consider excluding all non-Federal HCP lands in proposed critical habitat units CO-6 and CO-7 totaling 18,407 ac (7,449 ha) from final western yellow-billed cuckoo critical habitat designation under section 4(b)(2) of the Act. We encourage any public comments in relation to this consideration.

## San Luis Valley Partnerships

The San Luis Valley has many proactive conservation efforts underway that protect and enhance wetland and riparian habitat, and will contribute to the conservation and enhancement of habitat for the western yellow-billed cuckoo. These efforts include, but are not limited to, voluntary incentive-based conservation programs for private land by the Colorado Parks and Wildlife and the Service's Partners for Fish and Wildlife Program. The Rio Grande Initiative has raised more than \$10 million in Federal, State, and private funding, and has protected over 18 properties and 13,600 ac (5,506 ha) of land along the Rio Grande (not including lands in Mineral County). Conservation successes have included the 585-ac (237-ha) River Valley Ranch I near the 1,025-ac (415-ha) Rio Grande/Shriver-Wright State Wildlife Area, the Gilmore Ranch near Alamosa, and the 3,200-ac (1,296-ha) Cross Arrow Ranch at the confluence of the Rio Grande and Conejos River (adjacent to the BLM's McIntire-Simpson property) (Butler 2010). Other conservation actions include the establishment of BLM's Rio Grande Natural Area along a 33-mi (53-km) stretch of the Rio Grande from the southern boundary of the Alamosa NWR to the New Mexico State line, extending 0.25 mi (0.4 km) on either side of the river, although this area is outside proposed critical habitat.

As a result of multiple fundraising efforts by various public and private entities that operate in the San Luis Valley, as of October 2011, over 32,000 ac (12,955 ha) of land and 1,762 ac (713 ha) of riparian habitat in the HCP area have been protected by conservation easements (see Tables 1 and 2), although only a portion lies within the area

proposed for western yellow-billed cuckoo critical habitat designation. Approximately 1,500 ac (607 ha) of riparian habitat are under permanent conservation easement along the Rio Grande and Conejos River (Shoemaker 2012, *in litt.*). The easements prohibit any activity that alters or diminishes the value of the wildlife habitat.

We will consider excluding all lands under permanent conservation easement within the proposed critical habitat units CO-6 and CO-7 from final western yellow-billed cuckoo critical habitat designation under section 4(b)(2) of the Act. These same lands are also being considered for exclusion based on their inclusion in the San Luis Valley Regional HCP. We encourage any public comments in relation to this consideration.

### **Consideration of Economic Impacts**

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. To assess the probable economic impacts of a designation, we must first evaluate specific land uses or activities and projects that may occur in the area of the critical habitat. We then must evaluate the impacts that a specific critical habitat designation may have on restricting or modifying specific land uses or activities for the benefit of the species and its habitat within the areas proposed. We then identify which conservation efforts may be the result of the species being listed under the Act versus those attributed solely to the designation of critical habitat for this particular species. The probable economic impact of a proposed critical habitat designation is analyzed by comparing scenarios “with

critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, which includes the existing regulatory and socioeconomic burden imposed on landowners, managers, or other resource users potentially affected by the designation of critical habitat (e.g., under the Federal listing as well as other Federal, State, and local regulations). The baseline, therefore, represents the costs of all efforts attributable to the listing of the species under the Act (i.e., conservation of the species and its habitat incurred regardless of whether critical habitat is designated). The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts would not be expected without the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat, above and beyond the baseline costs. These are the costs we use when evaluating the benefits of inclusion and exclusion of particular areas from the final designation of critical habitat should we choose to conduct an optional 4(b)(2) exclusion analysis.

For this particular designation, we developed an incremental effects memorandum (IEM) considering the probable incremental economic impacts that may result from this proposed designation of critical habitat. The information contained in our IEM was then used to develop a screening analysis of the probable effects of the designation of critical habitat for the western yellow-billed cuckoo (Industrial Economics Incorporated (IEc) 2013a; IEc 2013b). We began by conducting a screening analysis of the proposed designation of critical habitat in order to focus our analysis on the key factors that are

likely to result in incremental economic impacts. The purpose of the screening analysis is to filter out the geographic areas in which the critical habitat designation is unlikely to result in incremental economic impacts. In particular, the screening analysis considers baseline impacts (i.e., impacts absent critical habitat designation) and includes probable economic impacts where land and water use may be subject to conservation plans, land management plans, best management practices, or regulations that protect the habitat area as a result of the Federal listing status of the species. The screening analysis filters out particular areas of critical habitat that are already subject to such protections and are, therefore, unlikely to incur incremental economic impacts. Ultimately, the screening analysis allows us to focus our analysis on evaluating the specific areas or sectors that may incur probable incremental economic impacts as a result of the designation. The screening analysis also assesses whether any unoccupied units may require additional management or conservation efforts as a result of the critical habitat designation and whether the units may incur incremental economic impacts. This screening analysis combined with the information contained in our IEM are what we consider our draft economic analysis of the proposed critical habitat designation for the western yellow-billed cuckoo and are summarized in the narrative below.

Executive Orders 12866 and 13563 direct Federal agencies to assess the costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consistent with the E.O. regulatory analysis requirements, our effects analysis under the Act may take into consideration impacts to both directly and indirectly impacted entities, where practicable and reasonable. We assess to the extent practicable,

the probable impacts, if sufficient data are available, to both directly and indirectly impacted entities. As part of our screening analysis, we considered the types of economic activities that are likely to occur within the areas likely affected by the critical habitat designation. In our evaluation of the probable incremental economic impacts that may result from the proposed designation of critical habitat for the western yellow-billed cuckoo, first we identified, in the IEM dated June 19, 2013, probable incremental economic impacts associated with the following categories of activities: (1) Water management, including hydropower operations; (2) restoration and conservation projects; (3) fire management; (4) transportation activities, including bridge construction; (5) recreation activities; (6) livestock grazing and agriculture; (7) mining; (8) residential and commercial development; and (9) border protection activities. We considered each industry or category individually. Additionally, we considered whether their activities have any Federal involvement. Critical habitat designation will not affect activities that do not have any Federal involvement as the designation of critical habitat only affects activities conducted, funded, permitted, or authorized by Federal agencies. In areas where the western yellow-billed cuckoo is present, Federal agencies will already be required to consult with the Service under section 7 of the Act on activities they fund, permit, or implement that may affect the species. If we finalize this proposed critical habitat designation, consultations to avoid the destruction or adverse modification of critical habitat would be incorporated into the existing consultation process. Therefore, disproportionate impacts to any geographic area or sector would not likely be a result of this critical habitat designation.

In our IEM, we attempted to clarify the distinction between the effects that will result from the species being listed and those attributable to the critical habitat designation (i.e., difference between the jeopardy and adverse modification standards). Because the designation of critical habitat for the western yellow-billed cuckoo is being proposed nearly concurrently with the listing, it has been our experience that it is more difficult to discern which conservation efforts are attributable to the species being listed and those which will result solely from the designation of critical habitat. However, the following specific circumstances in this case help to inform our evaluation: (1) The essential physical and biological features identified for critical habitat are the same features essential for the life requisites of the species, and (2) any actions that would result in sufficient harm or harassment to constitute jeopardy to the western yellow-billed cuckoo would also likely adversely affect the essential physical and biological features of critical habitat. The IEM outlines our rationale concerning this limited distinction between baseline conservation efforts and incremental impacts of the designation of critical habitat for this species. This evaluation of the incremental effects has been used as the basis to evaluate the probable incremental economic impacts of this proposed designation of critical habitat.

Except in limited instances, which the Service cannot predict at this time, project modifications requested to avoid adverse modification are likely to be the same as those needed to avoid jeopardy. Notwithstanding the low probability of such limited instances occurring, when the Service completes a consultation for the western yellow-billed cuckoo within critical habitat, that consultation will evaluate whether that project would

result in adverse modification.

The Service is not proposing to designate areas outside of the geographical area occupied by the species as critical habitat. All of the proposed units are occupied by the western yellow-billed cuckoo during their breeding season. Occupied breeding habitat is considered by the Service to be occupied year-round for the evaluation of project-related effects that degrade habitat quality. An evaluation of consultations for other riparian obligate listed migratory bird species that occupy some of the same areas (i.e., southwestern willow flycatcher and least Bell's vireo) informs the Service that project modifications intended to address adverse project effects focus primarily on various habitat restoration and conservation mechanisms, whether the adverse effects are upon members of the listed species or its designated critical habitat. We anticipate that these mechanisms overlap because the impacts in either case will most likely be affecting the persistence, development, and recycling of habitat. The result is that the application of such measures is anticipated to simultaneously remove jeopardy and adverse modification outcomes.

Therefore, only administrative costs are expected in the proposed critical habitat designation. While this additional analysis will require time and resources by both the Federal action agency and the Service, it is believed that, in most circumstances, these costs would predominantly be administrative in nature and would not be significant.

The proposed critical habitat designation for the western yellow-billed cuckoo



includes 80 units in nine western States: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Texas, Utah, and Wyoming. A total of 546,335 ac (221,094 ha) are proposed of which 193,691 ac (78,370 ha) are being considered for exclusions.

Approximately 32 percent of the proposed total acreage is Federal land, 9 percent is State land, 13 percent is owned by Tribal entities, and 46 percent is privately owned or owned by local government entities. All proposed critical habitat units are considered to be occupied.

The entities most likely to incur incremental costs are parties to section 7 consultations, including Federal action agencies and, in some cases, third parties, most frequently State agencies or municipalities. Activities we expect would be subject to consultations that may involve private entities as third parties are residential and commercial development that may occur on Tribal or private lands. However, based on coordination efforts with Tribal partners and State and local agencies, the cost to private entities within these sectors is expected to be relatively minor (administrative costs of less than \$5,000 per formal consultation effort) and, therefore, would not be significant.

The probable incremental economic impacts of the western yellow-billed cuckoo critical habitat designation are expected to be limited to additional administrative effort, as well as minor costs of conservation efforts resulting from a small number of future section 7 consultations. This is due to the proposed critical habitat being considered occupied by the species, and incremental economic impacts of critical habitat designation, other than administrative costs, are unlikely. At approximately \$5,000 or

less per formal consultation, in order to reach the threshold of \$100 million of incremental administrative impacts in a single year, critical habitat designation would have to result in more than 20,000 formal consultations in a single year. It is possible that 100 formal consultations will be needed in the first year after listing and fewer will be needed in subsequent years. Thus, the annual administrative burden from formal consultations will most likely not exceed \$500,000 in any given year. The total incremental effect of administrative cost for all activities (including technical assistance, informal consultations, and programmatic consultations) are estimated to be a maximum of \$3.2 million annually. Therefore, future probable incremental economic impacts are not likely to exceed \$100 million in any single year, and disproportionate impacts to any geographic area or sector are not likely as a result of this critical habitat designation.

As we stated earlier, we are soliciting data and comments from the public on the economic screening analysis, as well as all aspects of the proposed rule. We may revise the proposed rule or supporting documents to incorporate or address information we receive during the public comment period. In particular, we may exclude an area from critical habitat if we determine that the benefits of excluding the area outweigh the benefits of including the area, provided the exclusion will not result in the extinction of this species.

## **Peer Review**

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our critical habitat designation is based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment during this public comment period on our specific assumptions and conclusions in this proposed designation of critical habitat.

We will consider all comments and information we receive during the comment period on this proposed rule during our preparation of a final determination. Accordingly, the final decision may differ from this proposal.

### **Public Hearings**

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in the **FOR FURTHER INFORMATION CONTACT** section. We will schedule a public hearing on this proposal, if any are requested, and announce the dates, times, and places of any hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

**Required Determinations***Regulatory Planning and Review (Executive Orders 12866 and 13563)*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is significant because it will raise novel legal or policy issues.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*) as amended by

the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include such businesses as manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and forestry and logging operations with fewer than 500 employees and annual business less than \$7 million. To determine whether small entities may be affected, we will consider the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result.

In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed critical habitat designation, but the per-entity economic impact is not significant, the Service may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

Under the RFA, as amended, and following recent court decisions, Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself, and not the potential impacts to indirectly affected entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried by the agency is not likely to adversely modify critical habitat. Therefore, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Under these circumstances, it is our position that only Federal action agencies will be directly regulated by this designation. Therefore, because Federal agencies are not small entities, the Service may certify that the proposed critical habitat rule will not have a significant

economic impact on a substantial number of small entities.

We acknowledge, however, that in some cases, third-party proponents of the action subject to permitting or funding may participate in a section 7 consultation, and thus may be indirectly affected. We believe it is good policy to assess these impacts if we have sufficient data before us to complete the necessary analysis, whether or not this analysis is strictly required by the RFA. While this regulation does not directly regulate these entities, in our draft economic analysis we will conduct a brief evaluation of the potential number of third parties participating in consultations on an annual basis in order to ensure a more complete examination of the incremental effects of this proposed rule in the context of the RFA.

In conclusion, we believe that, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of critical habitat will only directly regulate Federal agencies, which are not by definition small business entities. As such, certify that, if promulgated, this designation of critical habitat would not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required. However, though not necessarily required by the RFA, in our draft economic analysis for this proposal we will consider and evaluate the potential effects to third parties that may be involved with consultations with Federal action agencies related to this action.

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. We do not expect that the proposed critical habitat designation for the western yellow-billed cuckoo would significantly affect energy supplies, distribution, or use, as the areas identified as proposed critical habitat are along riparian corridors in mostly remote areas with little energy supplies, distribution, or infrastructure in place. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

(1) This rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)-(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local,



or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests

squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule would significantly or uniquely affect small governments because it will not produce a Federal mandate of \$100 million or greater in any year, that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments. Therefore, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis and revise this assessment if appropriate.

#### *Takings—Executive Order 12630*

In accordance with Executive Order 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings implications of designating critical habitat for the western yellow-billed cuckoo in a takings implications assessment. Based on the best available information, the takings implications assessment concludes that this designation of critical habitat for the western yellow-billed cuckoo does not pose significant takings implications. However, we will further evaluate this issue as we develop our final

designation, and review and revise this assessment as warranted.

*Federalism—Executive Order 13132*

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A Federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies in California, Arizona, New Mexico, Texas, Colorado, Utah, Nevada, Idaho, and Wyoming. Because the species is concurrently being listed under the Act, the designation of critical habitat in areas currently occupied by the western yellow-billed cuckoo may impose nominal additional regulatory restrictions to those currently in place and, therefore, may have little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what Federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a

Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

*Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. This proposed rule uses standard property descriptions and identifies the elements of physical and biological features essential to the conservation of the western yellow-billed cuckoo within the proposed designated areas to assist the public in understanding the habitat needs of the species.

*Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local

governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)). However, when the range of the species includes States within the Tenth Circuit, such as that of western yellow-billed cuckoo, under the Tenth Circuit ruling in *Catron County Board of Commissioners v. U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996), we will undertake a NEPA analysis for critical habitat designation and notify the public of the availability of the draft environmental assessment for this proposal when it is has been completed.

*Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential

Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

#### *Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities,

and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. The following tribes are identified in the proposed designation: Fort Mojave Indian Tribe; Colorado River Indian Reservation; Fort Yuma Indian Reservation; Cocopah Tribe; Yavapai-Apache Nation; San Carlos Reservation; Navajo Nation; Santa Clara, San Juan, and San Ildefonso Pueblos; Cochiti, Santo Domingo, San Felipe, Sandia, Santa Ana and Isleta Pueblos; Shoshone-Bannock, Fort Hall Reservation; the Colusa Wintun Tribe; and the Ute Tribe, Uinta and Ouray Reservation. We will be working with the tribes identified above throughout the process of listing and designating critical habitat for the western yellow-billed cuckoo.

### **References Cited**

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the Sacramento Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

### **Authors**

The primary authors of this package are the staff members of the Sacramento Fish and Wildlife Office.

**List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

**Proposed Regulation Promulgation**

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

**PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS**

1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

2. Amend § 17.95(b) by adding an entry for “Yellow-billed Cuckoo (*Coccyzus americanus*), Western DPS” immediately following the entry for “Mariana Crow (*Corvus kubaryi*)”, to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**



\* \* \* \* \*

(b) *Birds.*

\* \* \* \* \*

Yellow-billed Cuckoo (*Coccyzus americanus*), Western DPS

(1) Critical habitat units are depicted for Arizona, California, Colorado, Idaho, New Mexico, Nevada, Texas, Utah, and Wyoming, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of western yellow-billed cuckoo consist of three components:

(i) *Riparian woodlands.* Riparian woodlands with mixed willow-cottonwood vegetation, mesquite-thorn-forest vegetation, or a combination of these that contain habitat for nesting and foraging in contiguous or nearly contiguous patches that are greater than 325 feet (100 meters) in width and 200 acres (81 hectares) or more in extent. These habitat patches contain one or more nesting groves, which are generally willow-dominated, have above average canopy closure (greater than 70 percent), and have a cooler, more humid environment than the surrounding riparian and upland habitats.

(ii) *Adequate prey base.* Presence of a prey base consisting of large insect fauna (for example, cicadas, caterpillars, katydids, grasshoppers, large beetles, dragonflies) and

tree frogs for adults and young in breeding areas during the nesting season and in post-breeding dispersal areas.

(iii) *Dynamic riverine processes*. River systems that are dynamic and provide hydrologic processes that encourage sediment movement and deposits that allow seedling germination and promote plant growth, maintenance, health, and vigor (e.g. lower gradient streams and broad floodplains, elevated subsurface groundwater table, and perennial rivers and streams). This allows habitat to regenerate at regular intervals, leading to riparian vegetation with variously aged patches from young to old. These dynamic riverine processes are considered essential for developing and maintaining the primary constituent elements provided in paragraphs (2)(i) and (2)(ii) of this entry.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

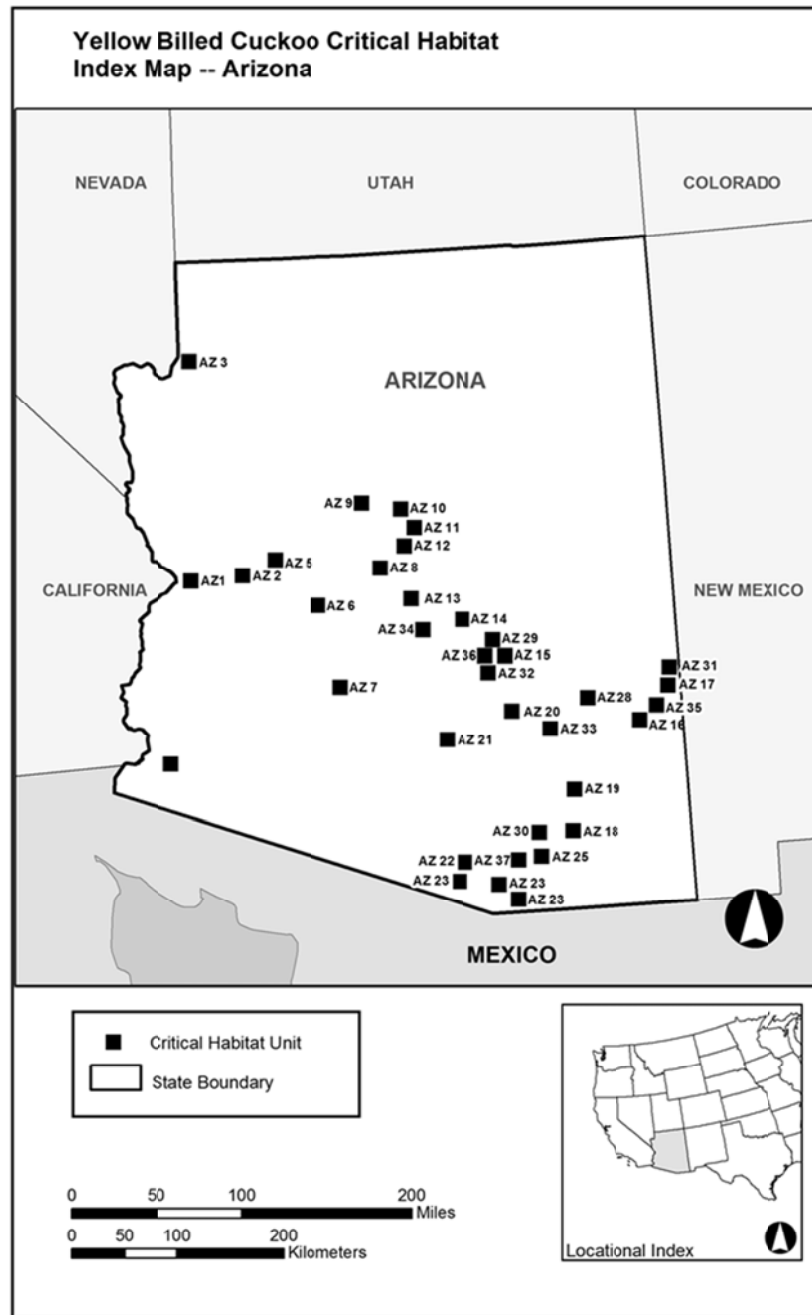
(4) *Critical habitat map units*. Data layers defining map units were created on a base of the Natural Resource Conservation Service National Agriculture Imagery Program (NAIP 2011), and critical habitat was then mapped using North American Datum (NAD) 83, Universal Transverse Mercator Zone 10N coordinates. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Sacramento Fish and Wildlife Office's

internet site at <http://www.fws.gov/sacramento>, or on <http://www.regulations.gov> at Docket No. FWS-R8-ES-2013-0011. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

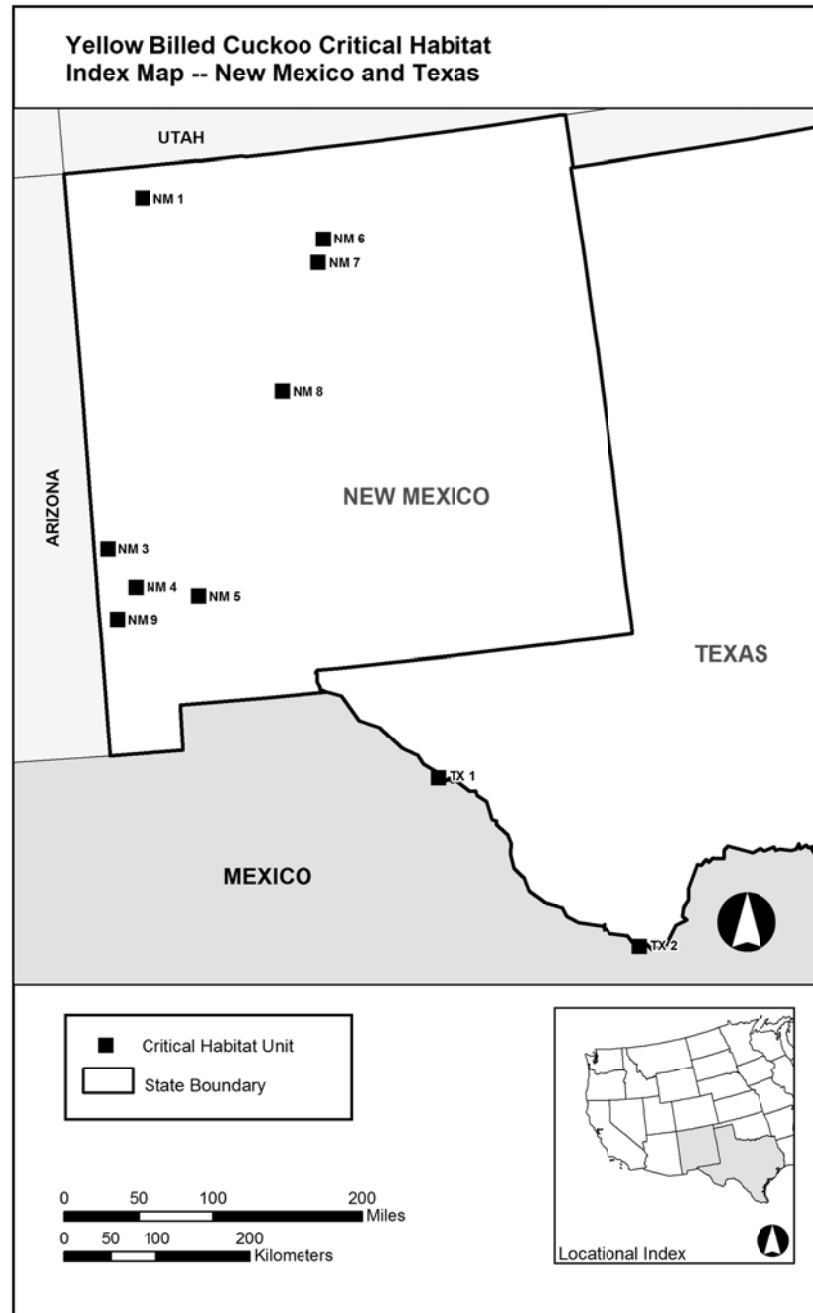
(5) Index map for California and Nevada follows:



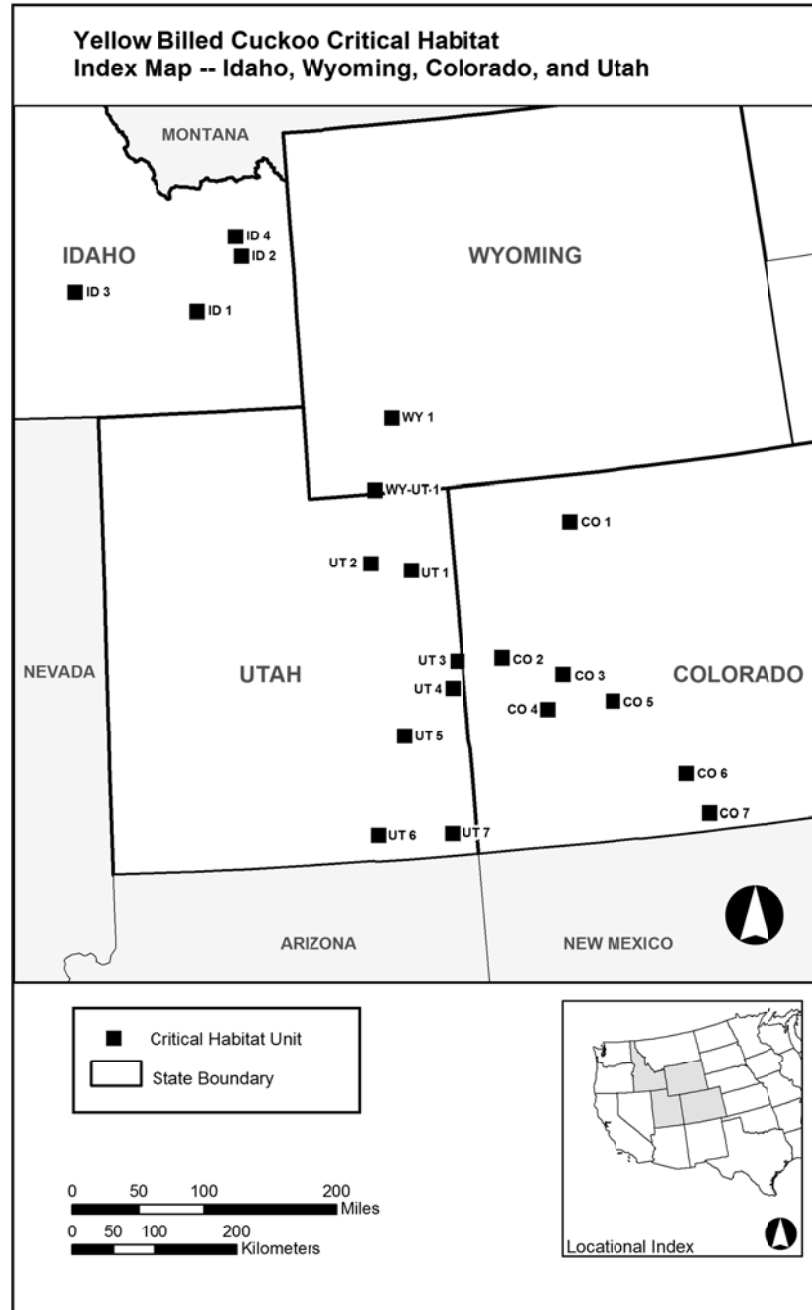
(6) Index map for Arizona follows:



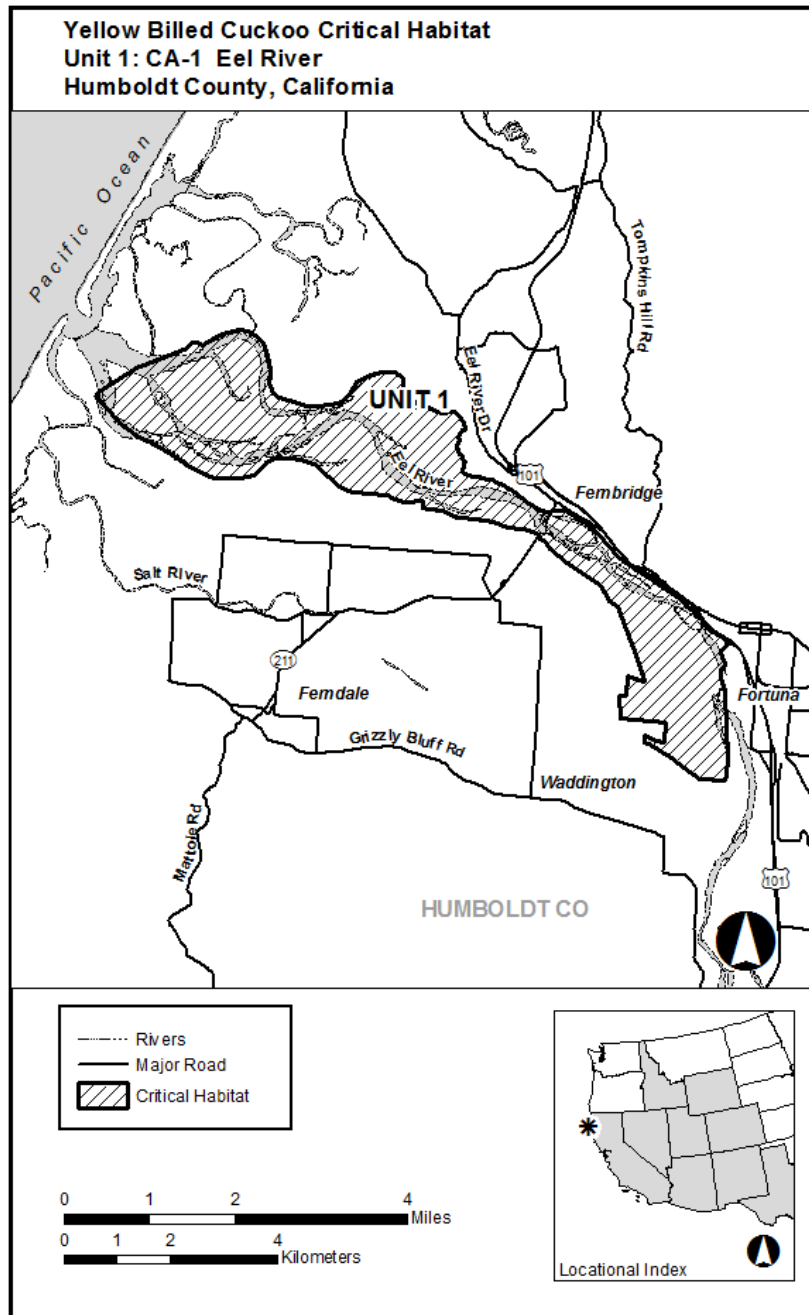
(7) Index map for New Mexico and Texas follows:



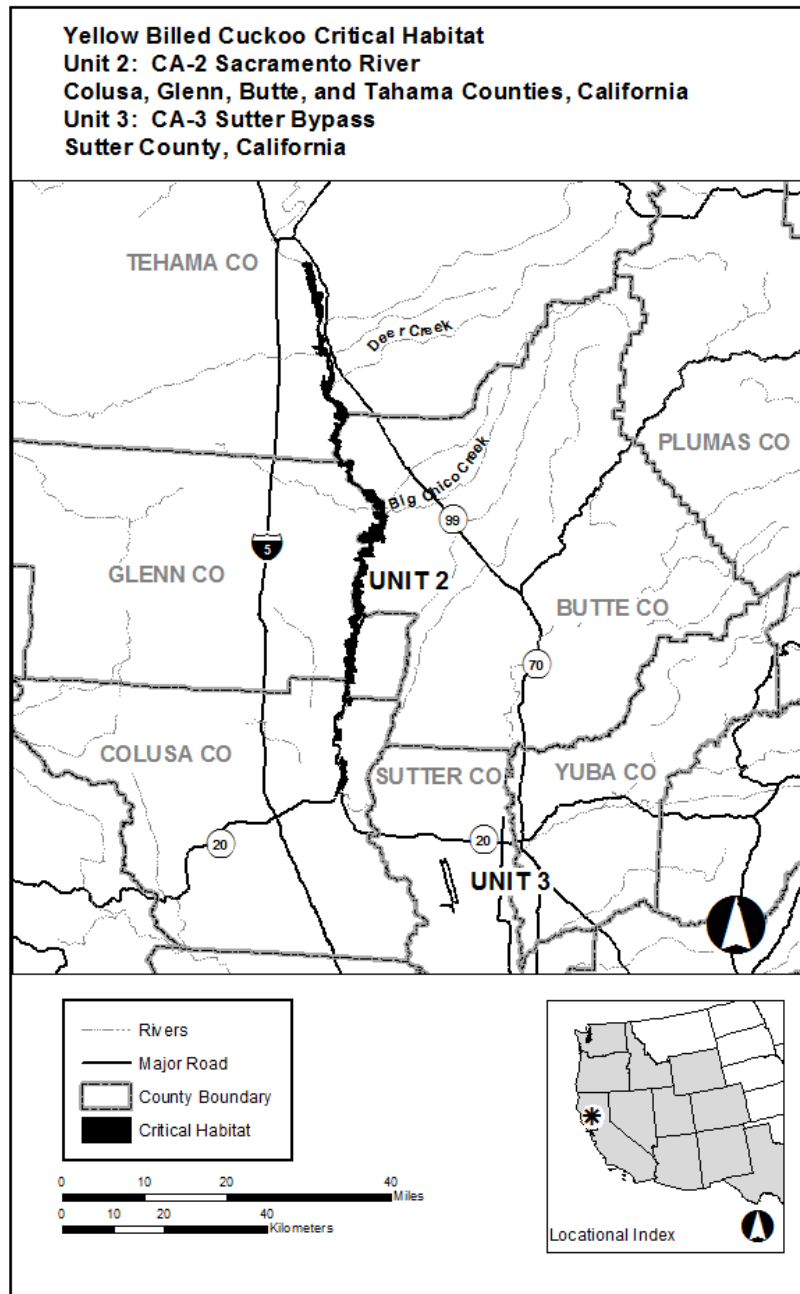
(8) Index map for Idaho, Wyoming, Colorado, and Utah follows:



(9) Unit 1: CA-1, Eel River; Humboldt County, California. Map of Unit 1 follows:



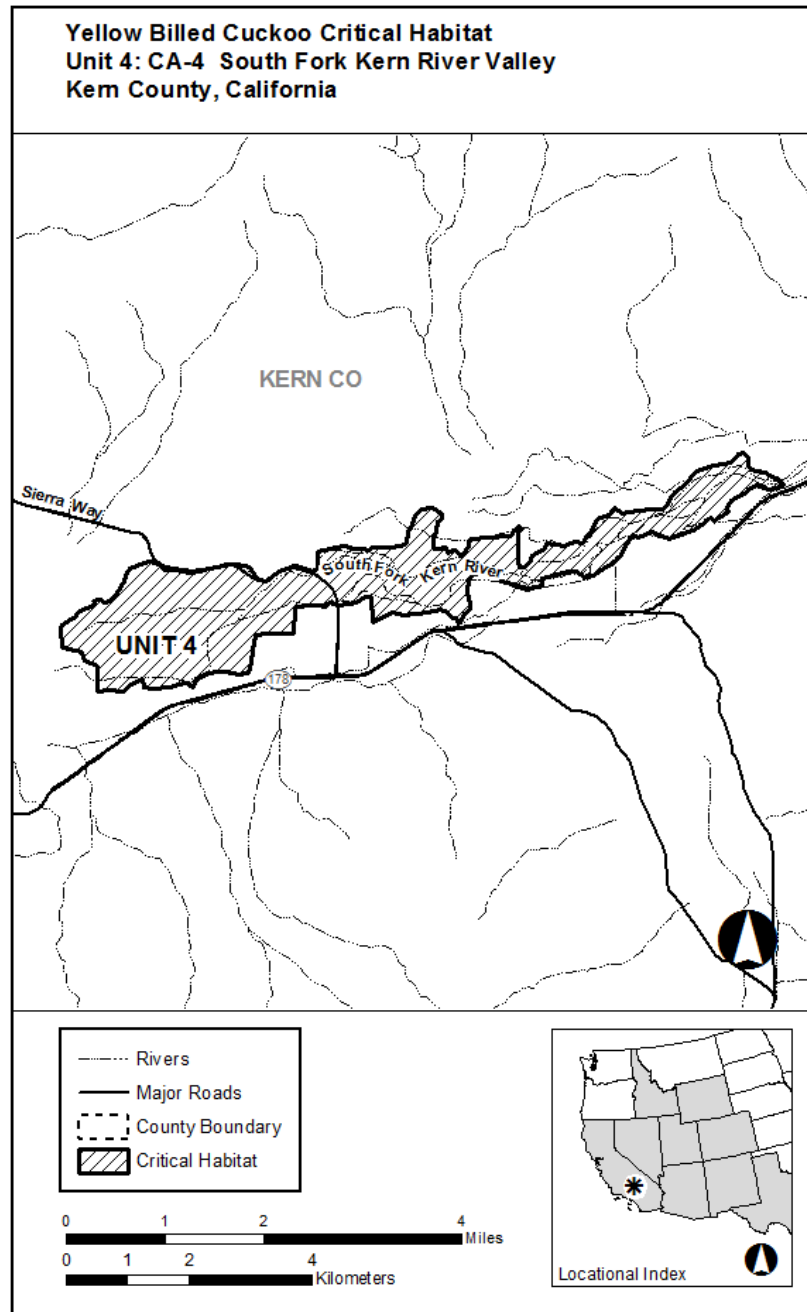
(10) Unit 2: CA-2, Sacramento River; Colusa, Glenn, Butte, and Tehama Counties, California. Map of Units 2 and 3 follows:





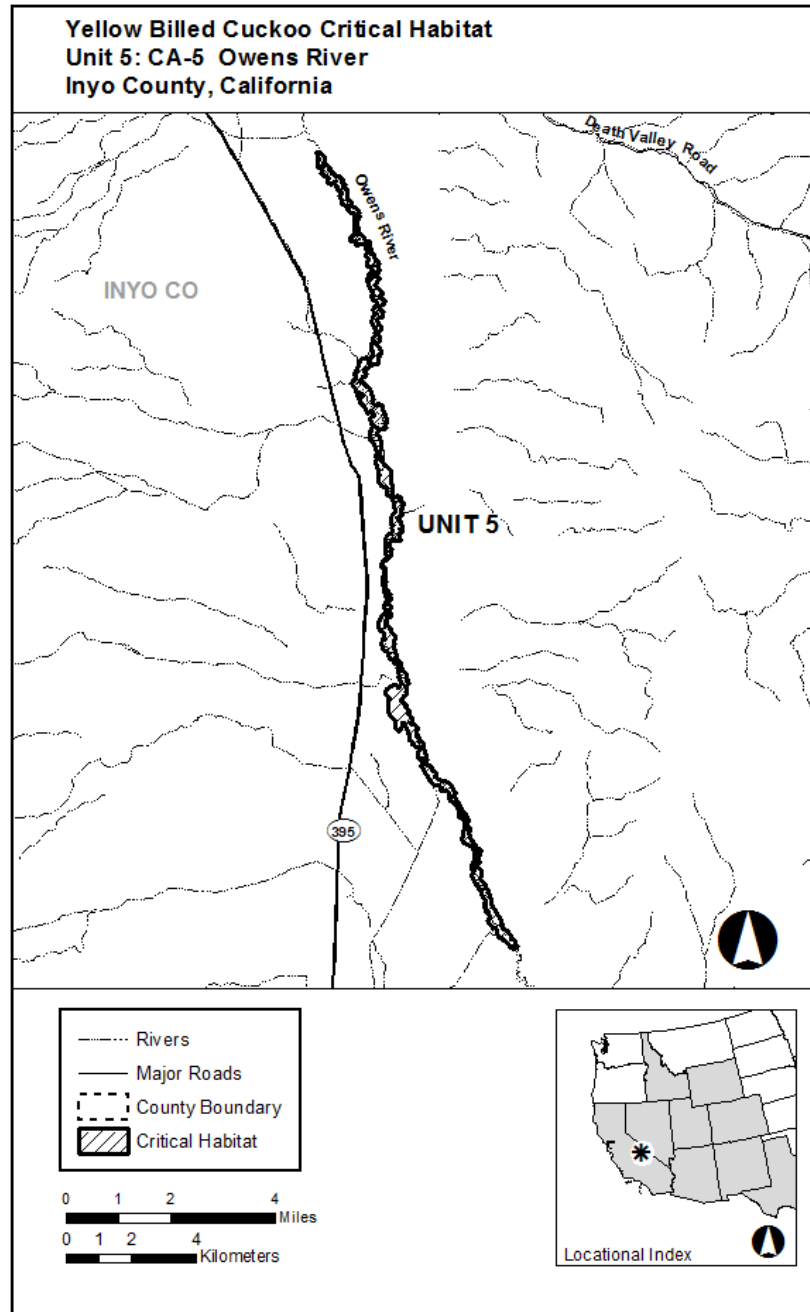
(11) Unit 3: CA-3, Sutter Bypass; Sutter County, California. Map of Unit 3 is provided at paragraph (10) of this entry.

(12) Unit 4: CA-4, South Fork Kern River Valley; Kern County, California. Map of Unit 4 follows:

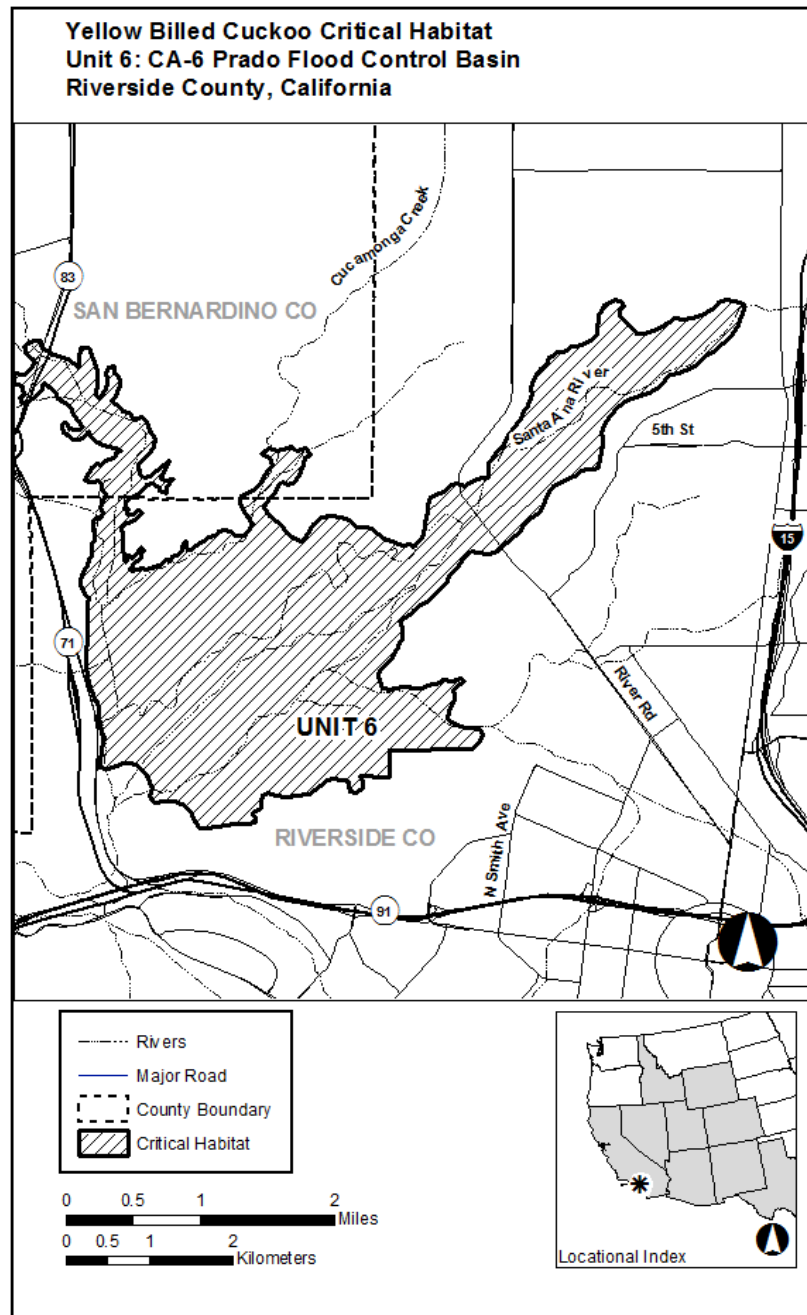


(13) Unit 5: CA-5, Owens River; Inyo County, California. Map of Unit 5

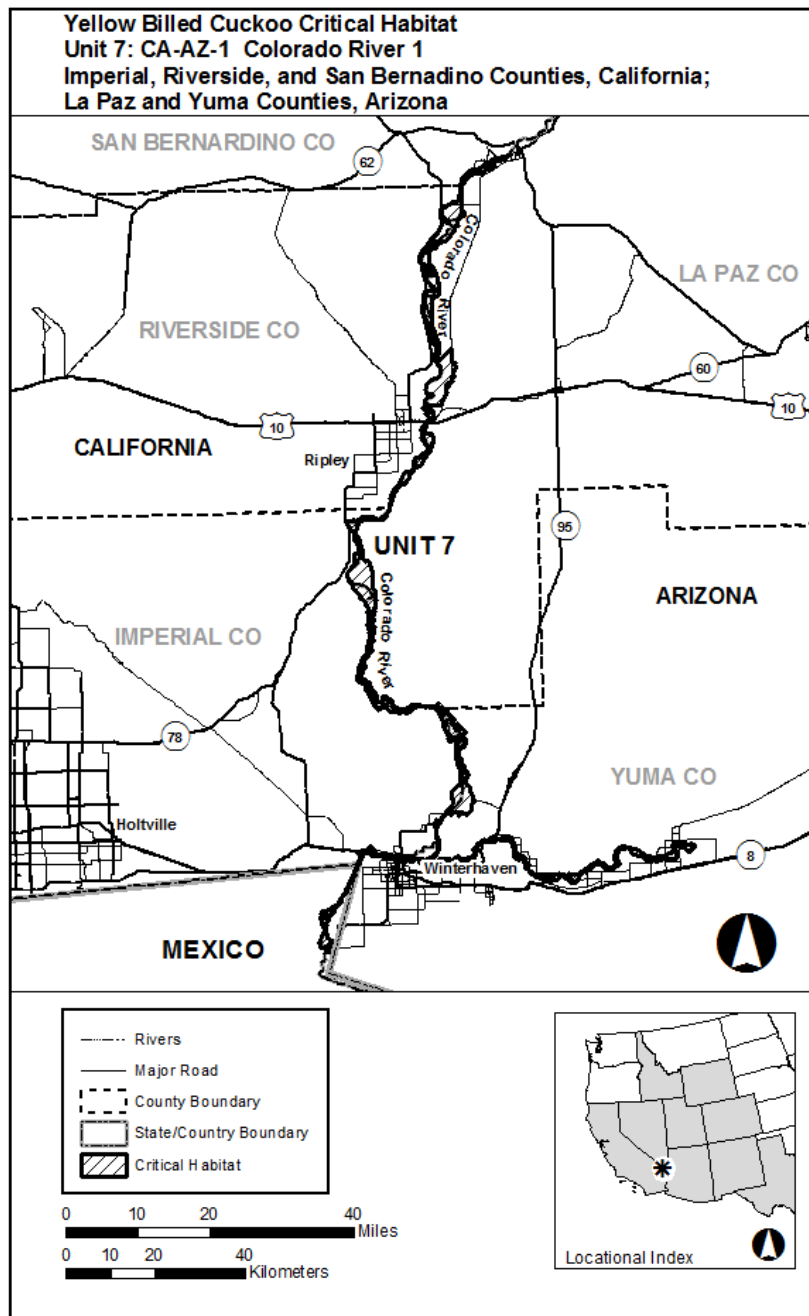
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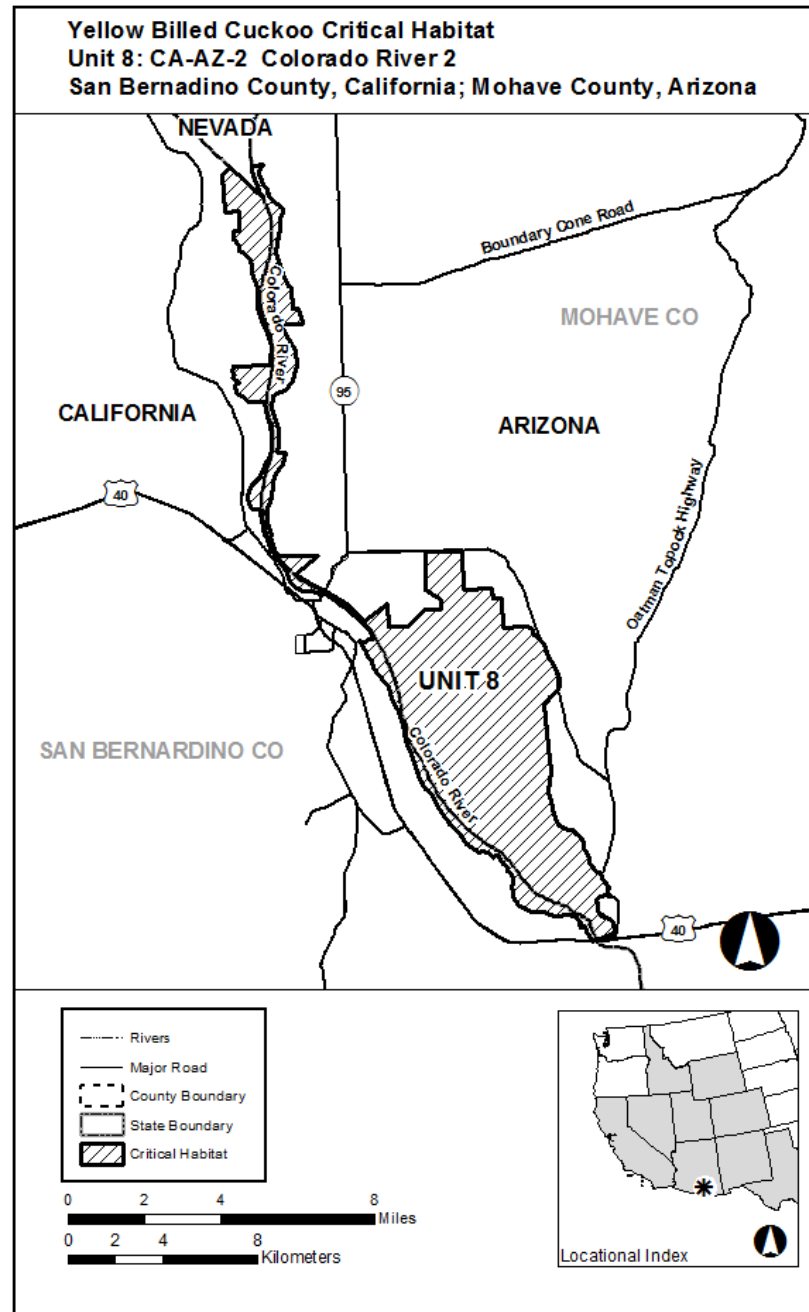
(14) Unit 6: CA-6, Prado Flood Control Basin; San Bernardino and Riverside Counties, California. Map of Unit 6 follows:



(15) Unit 7: CA/AZ-1, Colorado River 1; Imperial, Riverside, and San Bernardino Counties, California, and Yuma and La Paz Counties, Arizona. Map of Unit 7 follows:

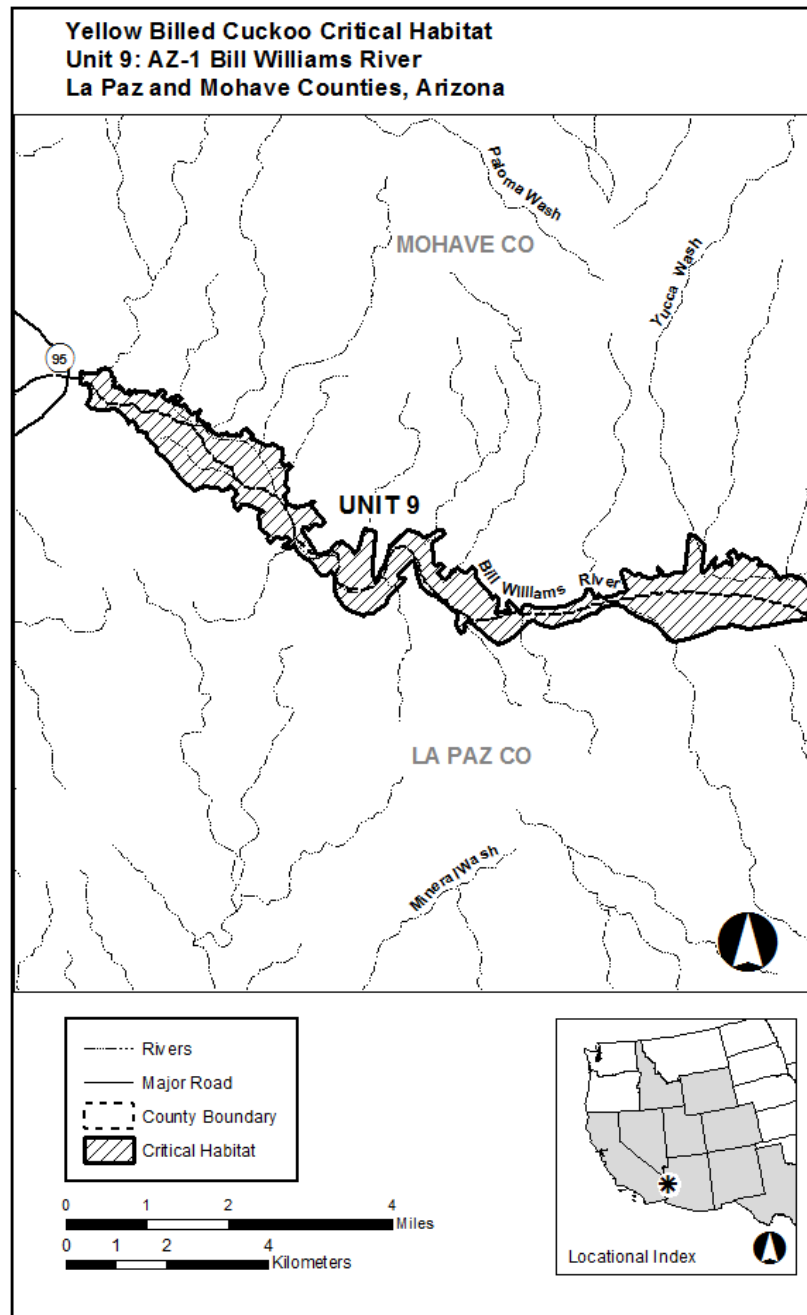


(16) Unit 8: CA/AZ-2, Colorado River 2; San Bernardino County, California, and Mojave County, Arizona. Map of Unit 8 follows:



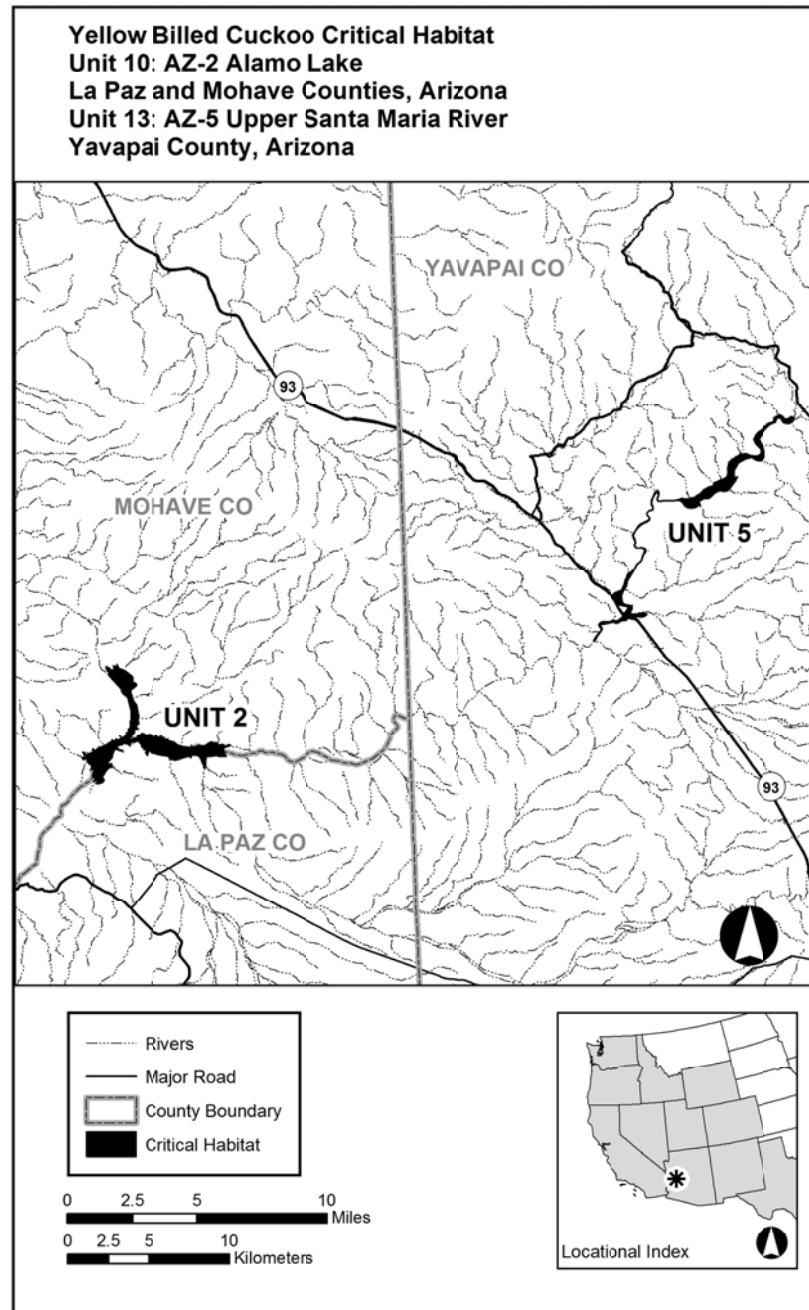
(17) Unit 9: AZ-1, Bill Williams River; Mojave and La Paz Counties, Arizona.

Map of Unit 9 follows:



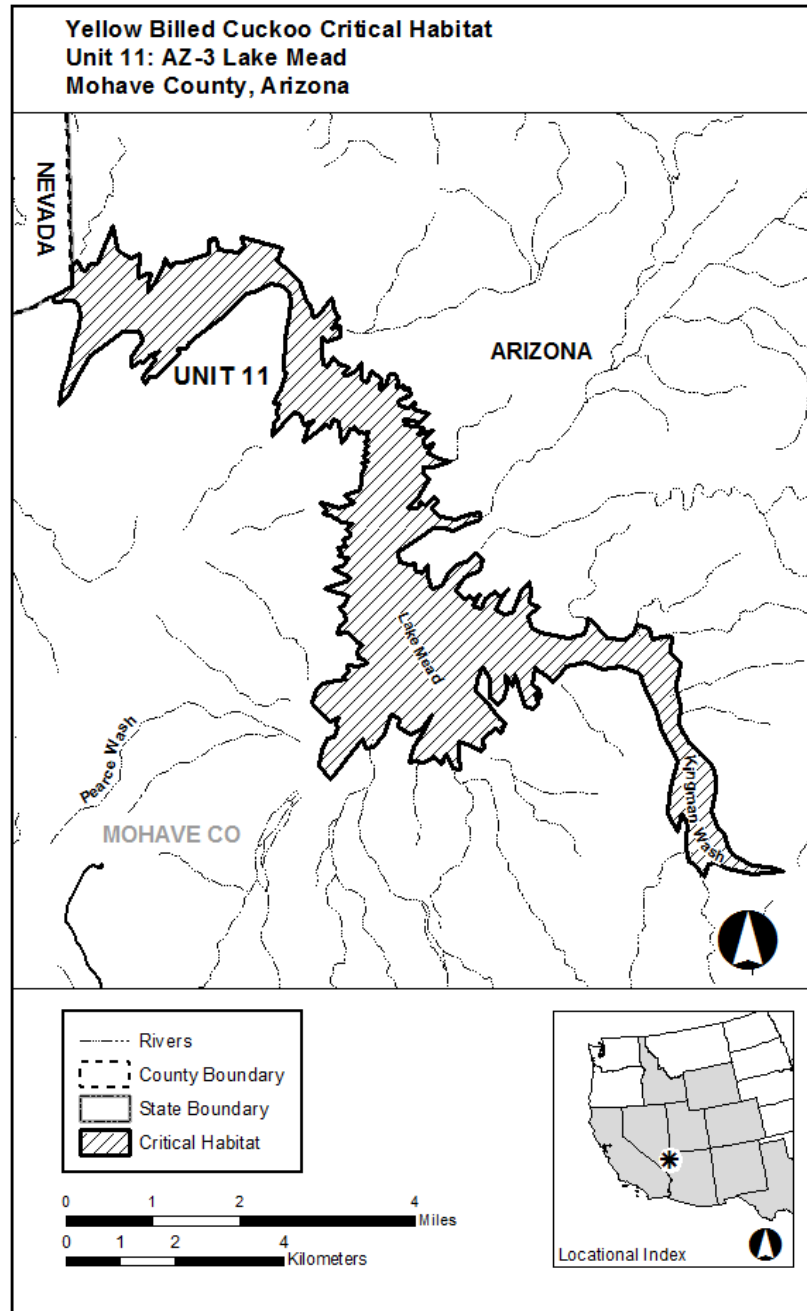
(18) Unit 10: AZ-2, Alamo Lake; Mojave and La Paz Counties, Arizona. Map of

Units 10 and 13 follows:



(19) Unit 11: AZ-3, Lake Mead; Mohave County, Arizona. Map of Unit 11

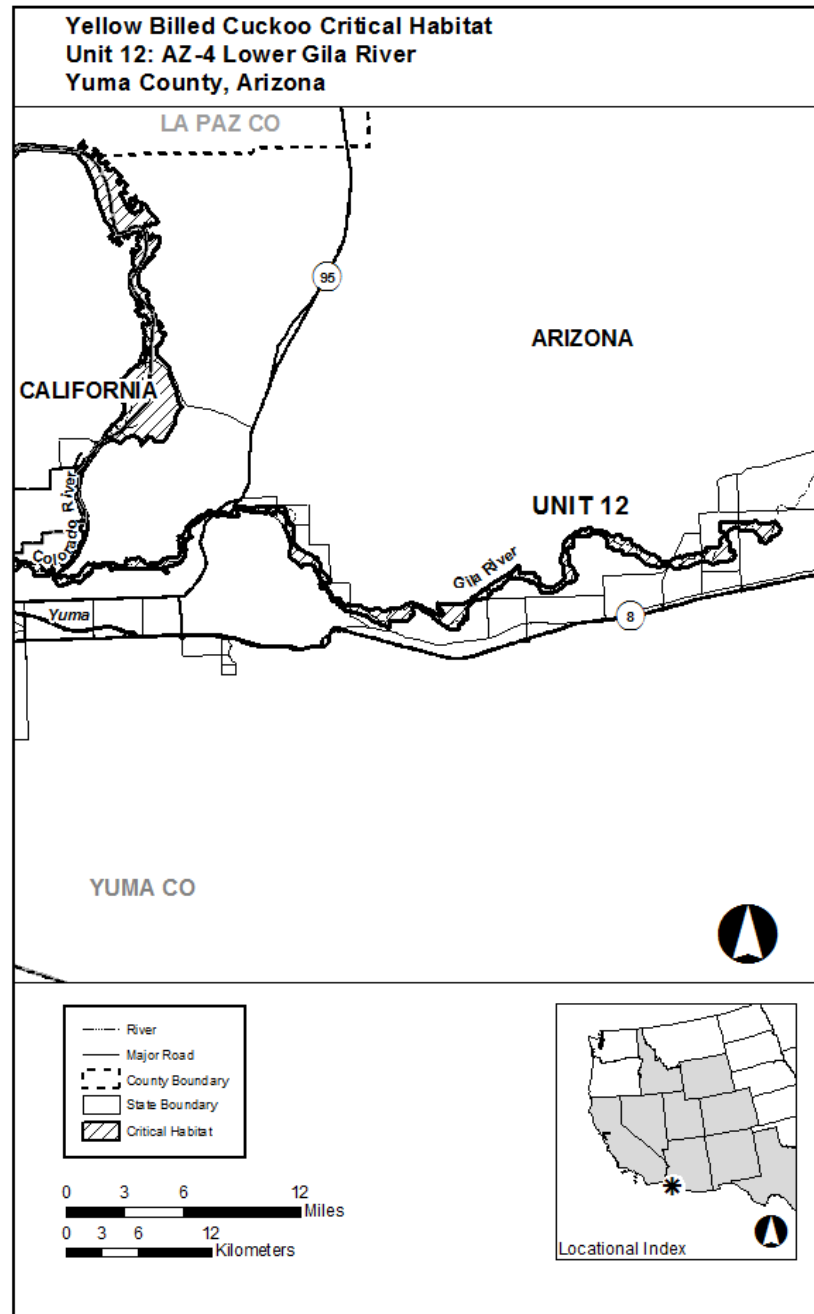
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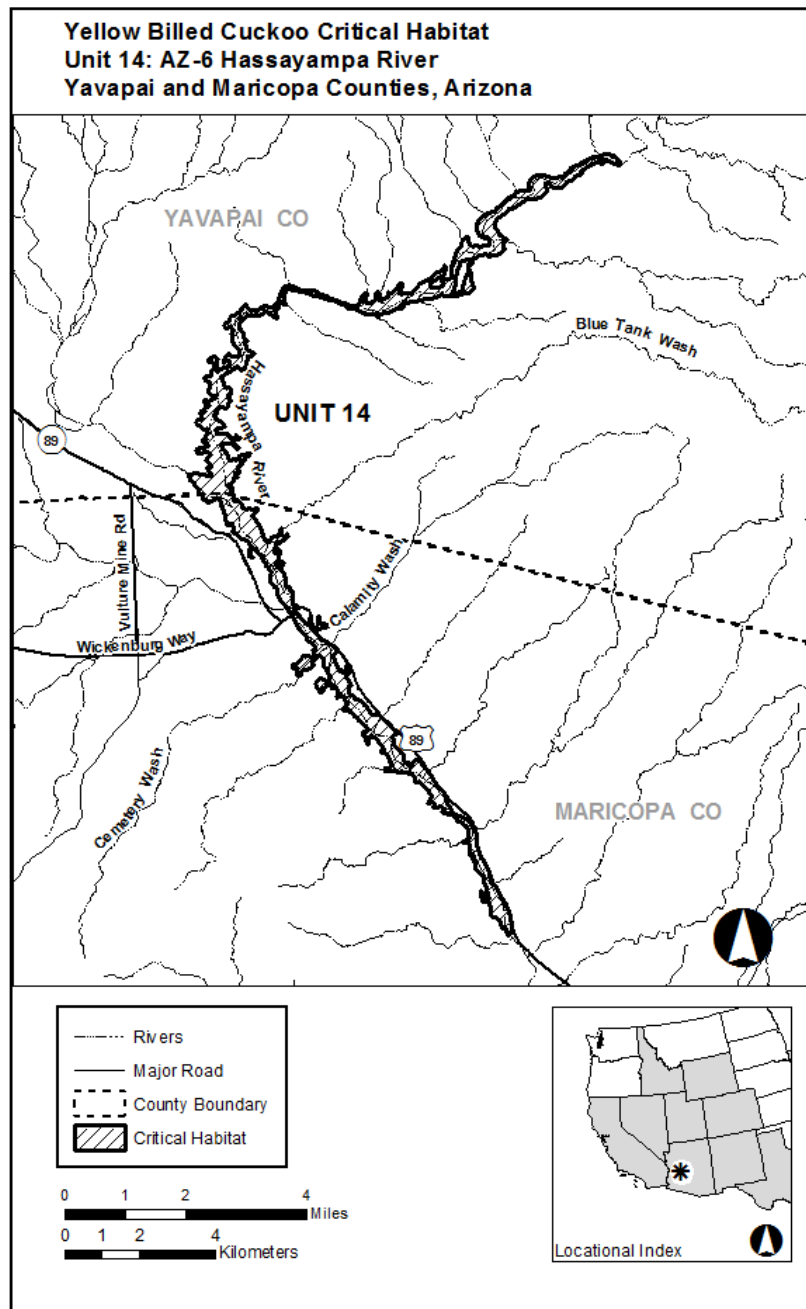
(20) Unit 12: AZ-4, Lower Gila River; Yuma County, Arizona. Map of Unit 12

follows:

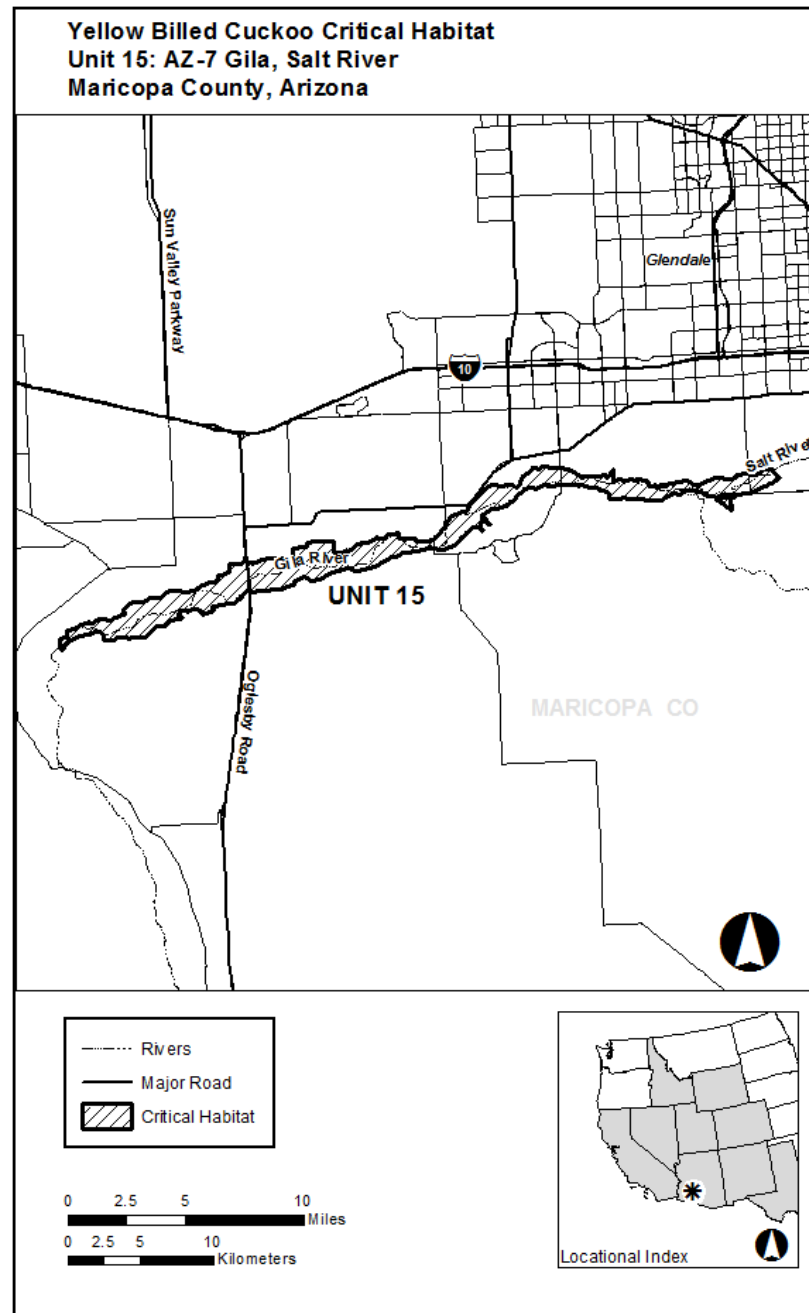


(21) Unit 13: AZ-5, Upper Santa Maria River; Yavapai County, Arizona. Map of Unit 13 is provided at paragraph (18) of this entry.

(22) Unit 14: AZ-6, Hassayampa River; Yavapai and Maricopa Counties, Arizona. Map of Unit 14 follows:

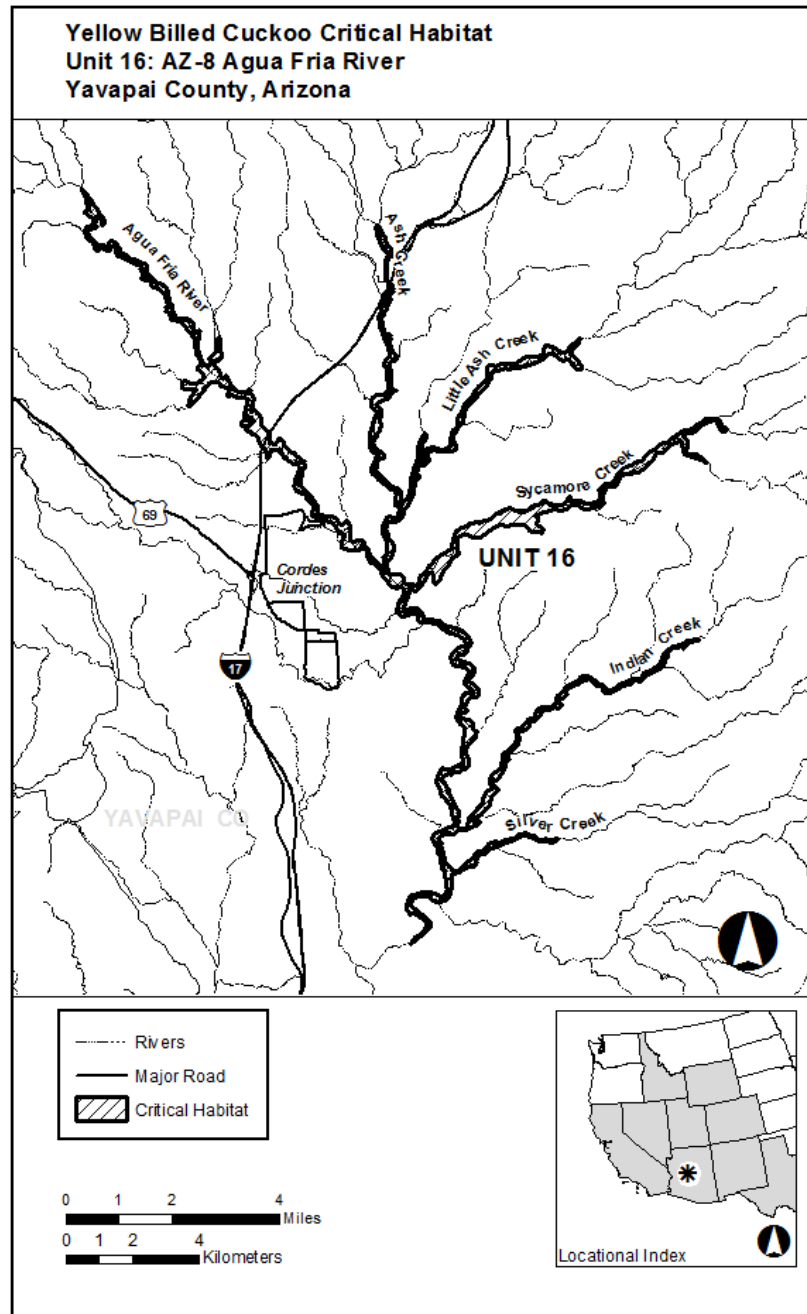


(23) Unit 15: AZ-7, Gila and Salt Rivers; Maricopa County, Arizona. Map of Unit 15 follows:

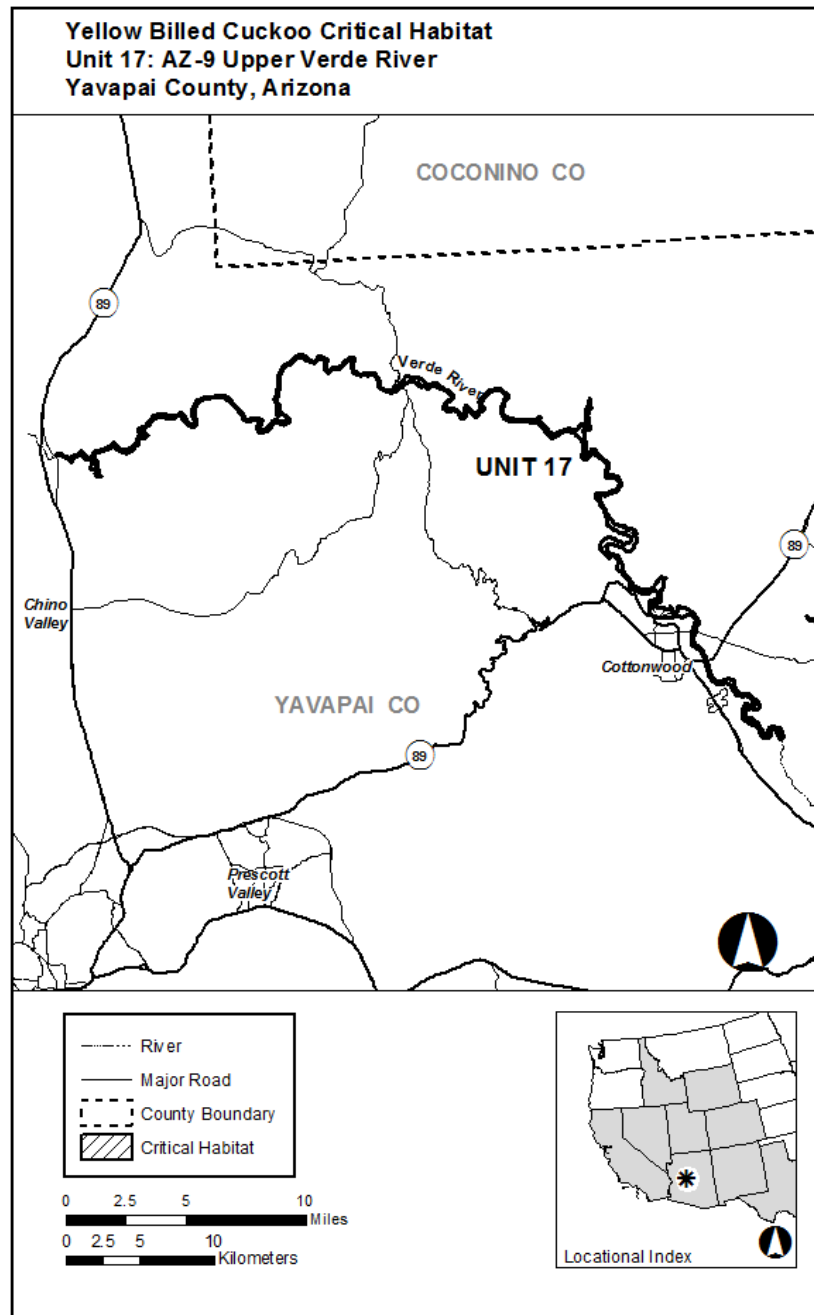


(24) Unit 16: AZ-8, Agua Fria River; Yavapai County, Arizona. Map of Unit 16

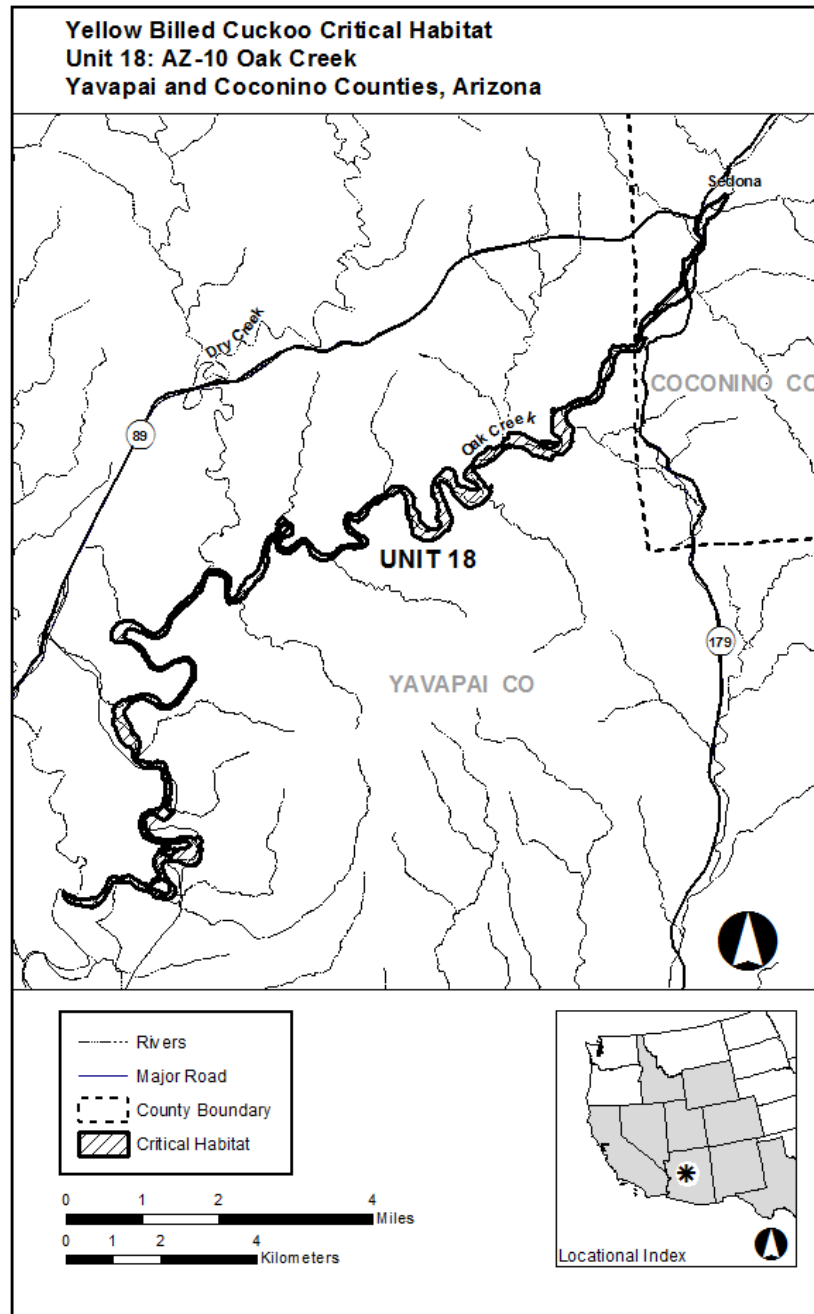
follows:



(25) Unit 17: AZ-9, Upper Verde River; Yavapai County, Arizona. Map of Unit 17 follows:

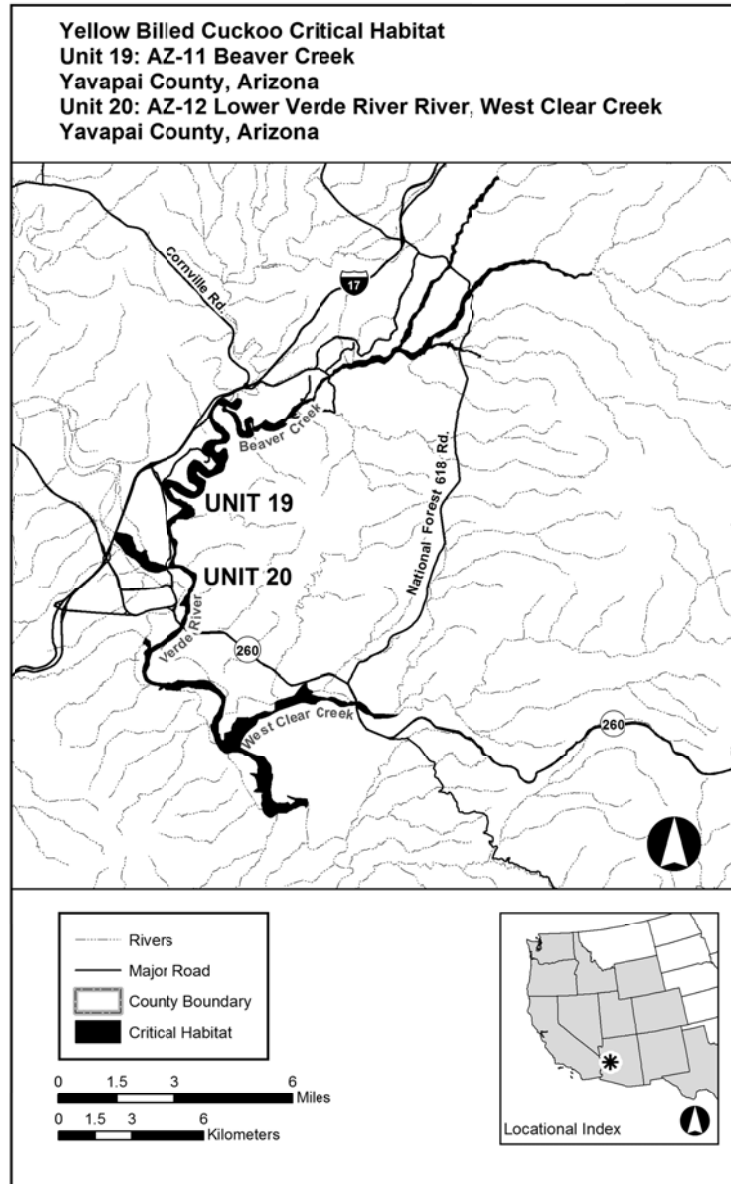


(26) Unit 18: AZ-10, Oak Creek; Yavapai and Coconino Counties, Arizona. Map of Unit 18 follows:



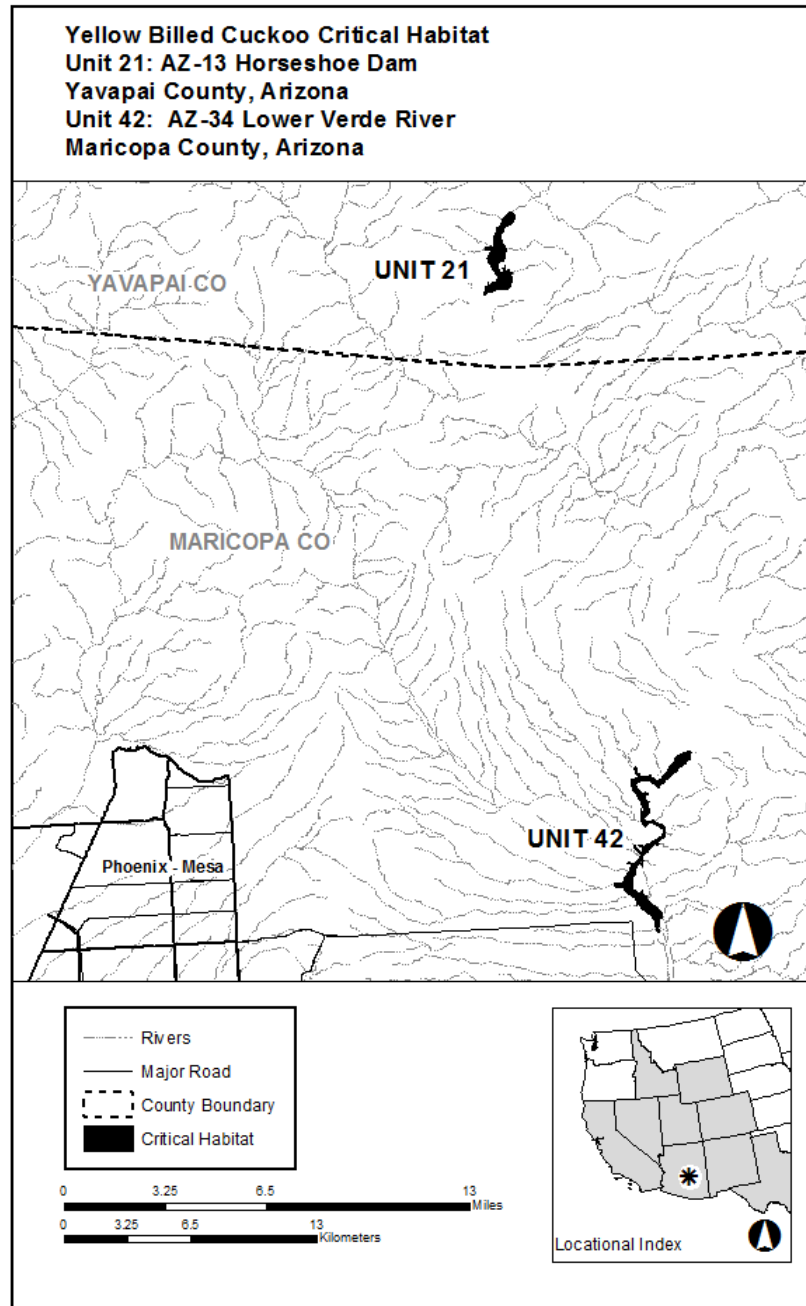
(27) Unit 19: AZ-11, Beaver Creek and tributaries; Yavapai County, Arizona.

Map of Units 19 and 20 follows:



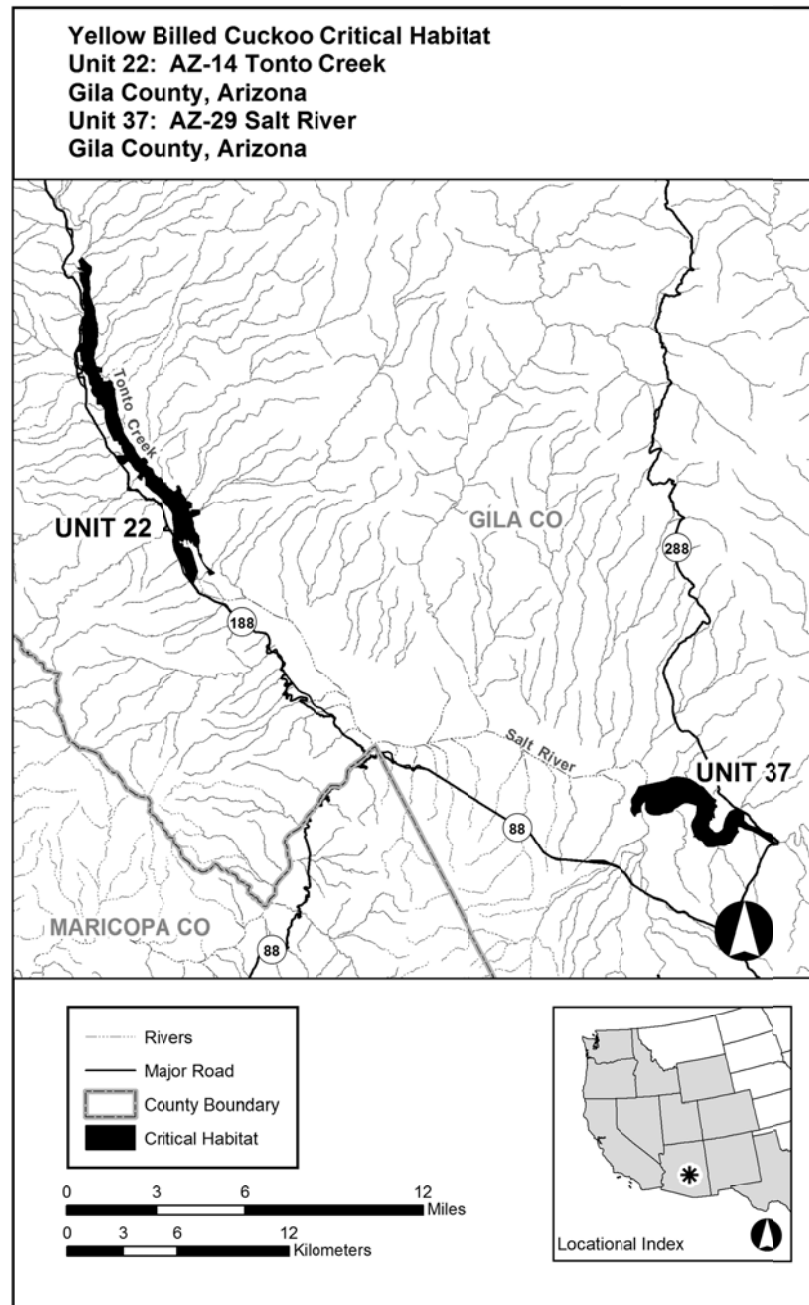
(28) Unit 20: AZ-12, Lower Verde River and West Clear Creek; Yavapai County, Arizona. Map of Unit 20 is provided at paragraph (27) of this entry.

(29) Unit 21: AZ-13, Horseshoe Dam; Yavapai County, Arizona. Map of Units 21 and 42 follows:



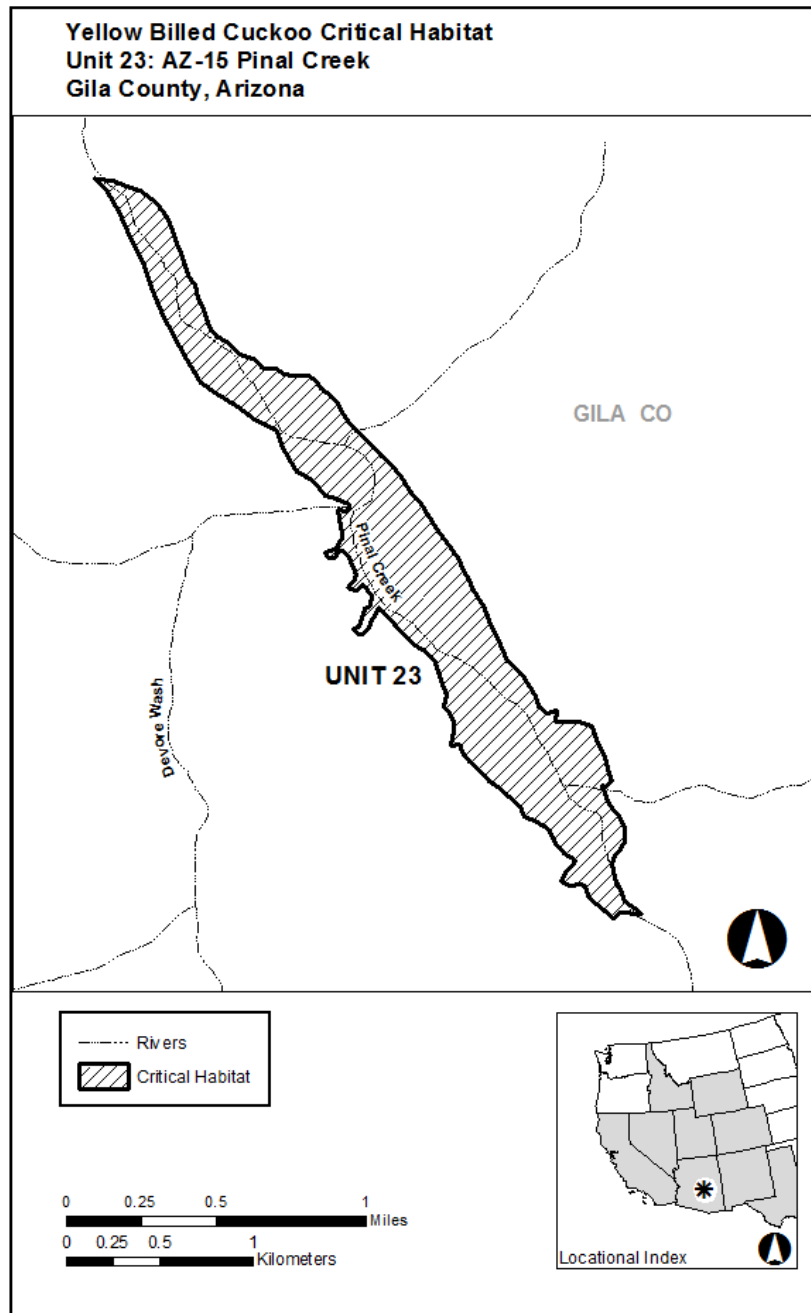


(30) Unit 22: AZ-14, Tonto Creek; Gila County, Arizona. Map of Units 22 and 37 follows:



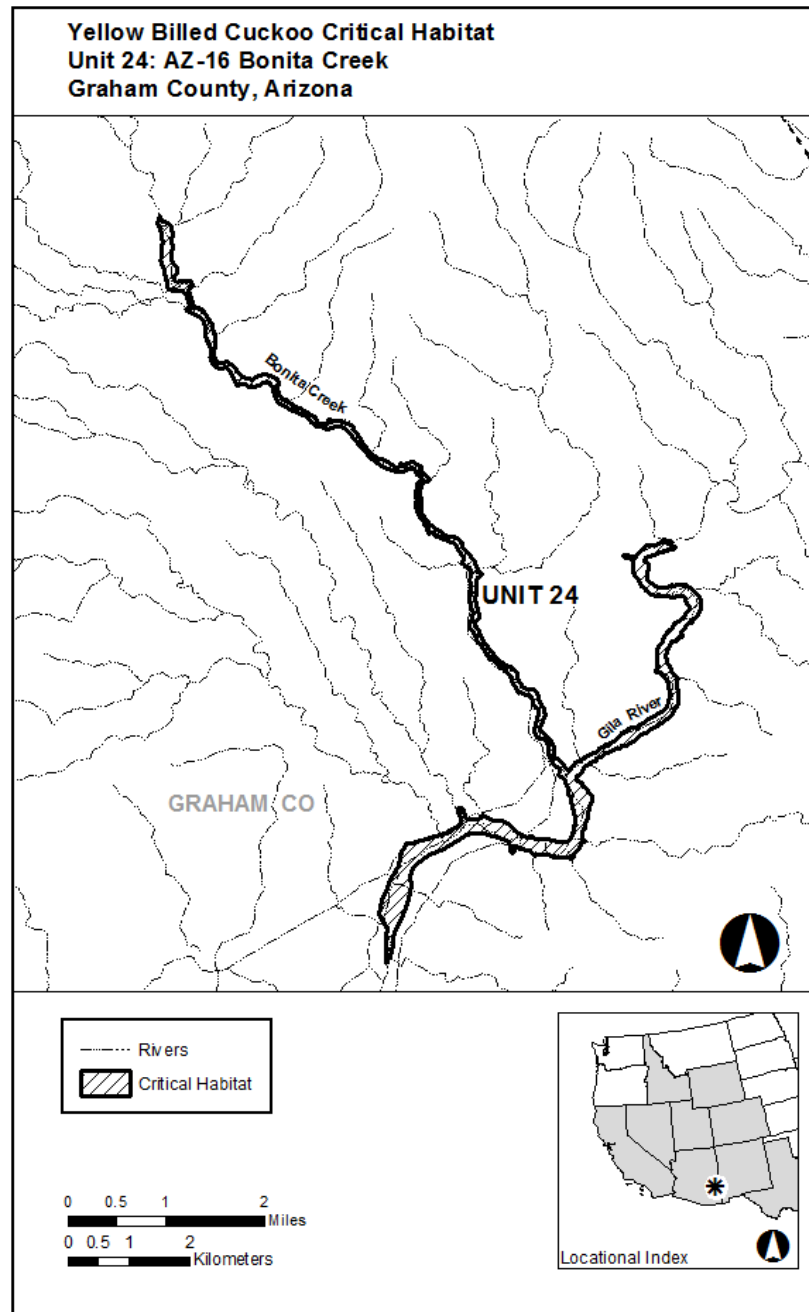
(31) Unit 23: AZ-15, Pinal Creek; Gila County, Arizona. Map of Unit 23

follows:



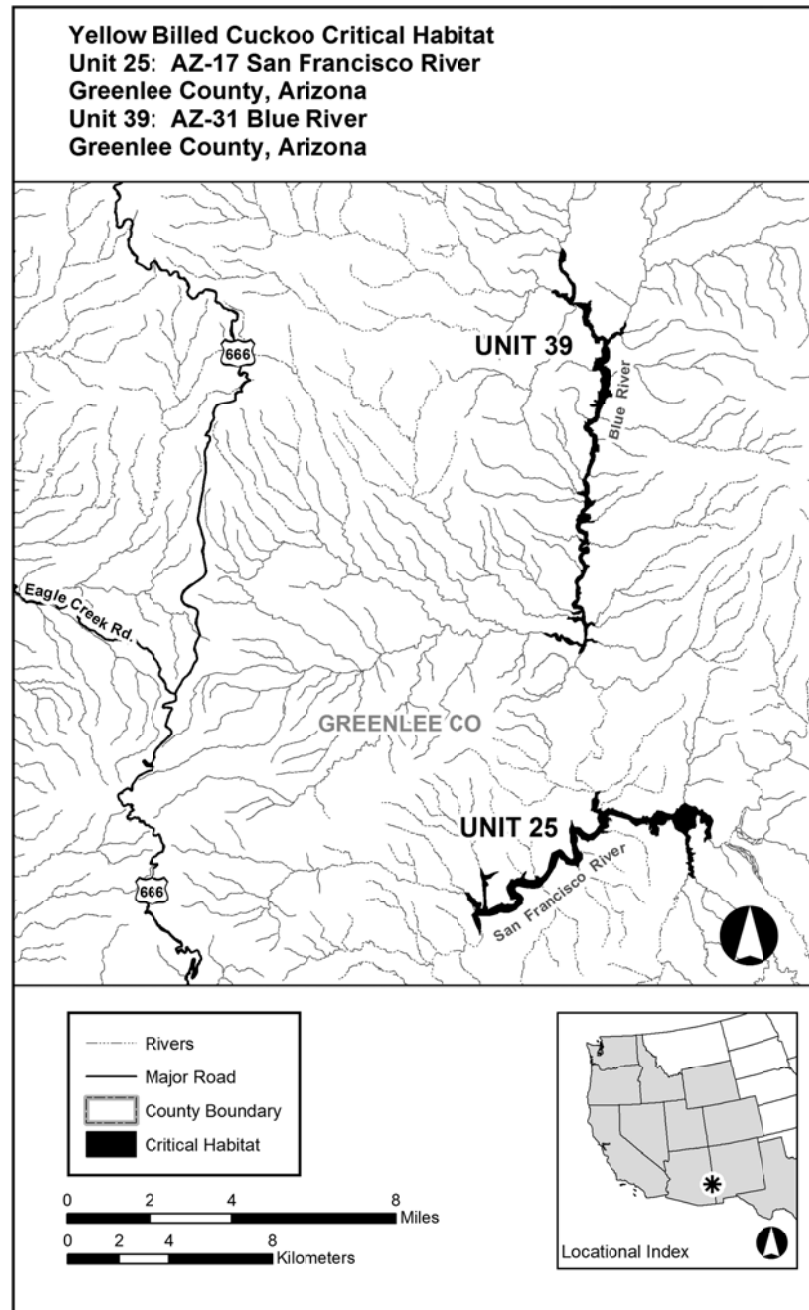
(32) Unit 24: AZ-16, Bonita Creek; Graham County, Arizona. Map of Unit 24

follows:



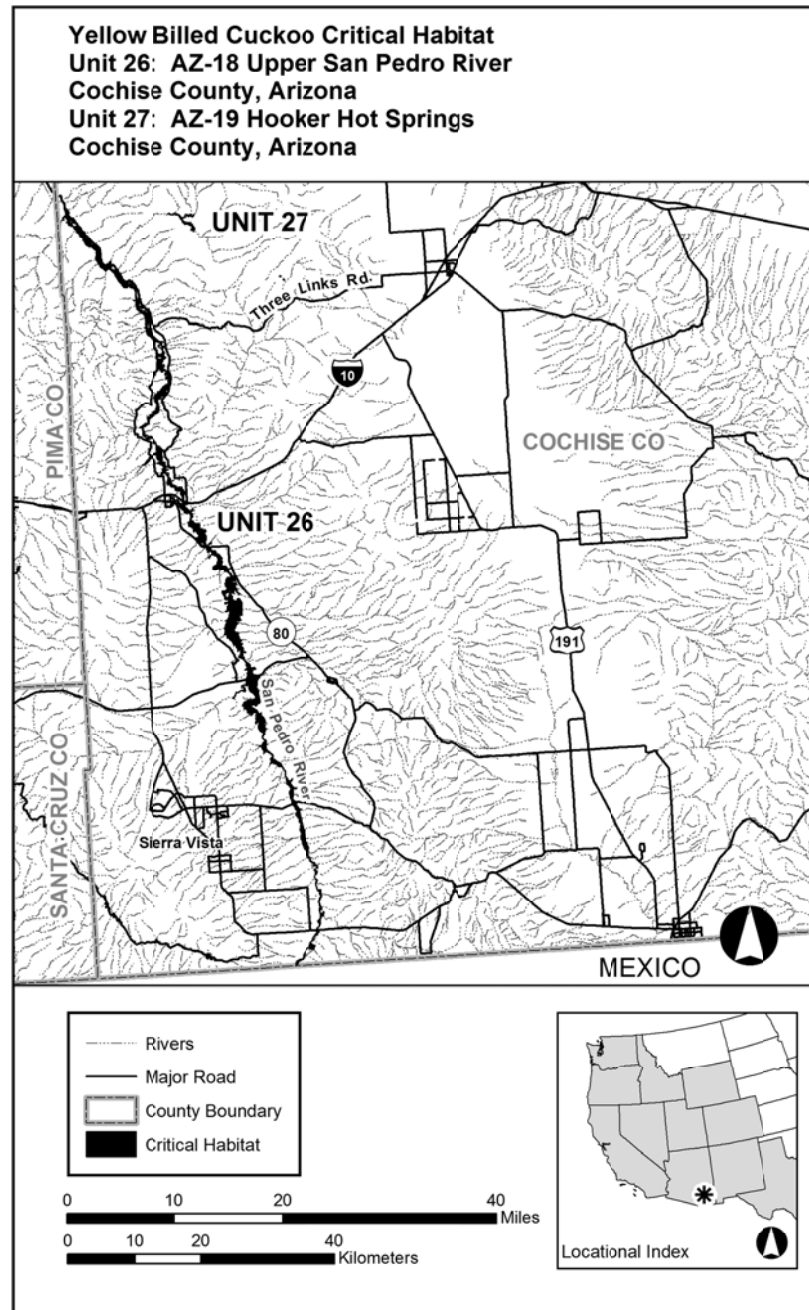
(33) Unit 25: AZ-17, San Francisco River; Greenlee County, Arizona. Map of

Units 25 and 39 follows:



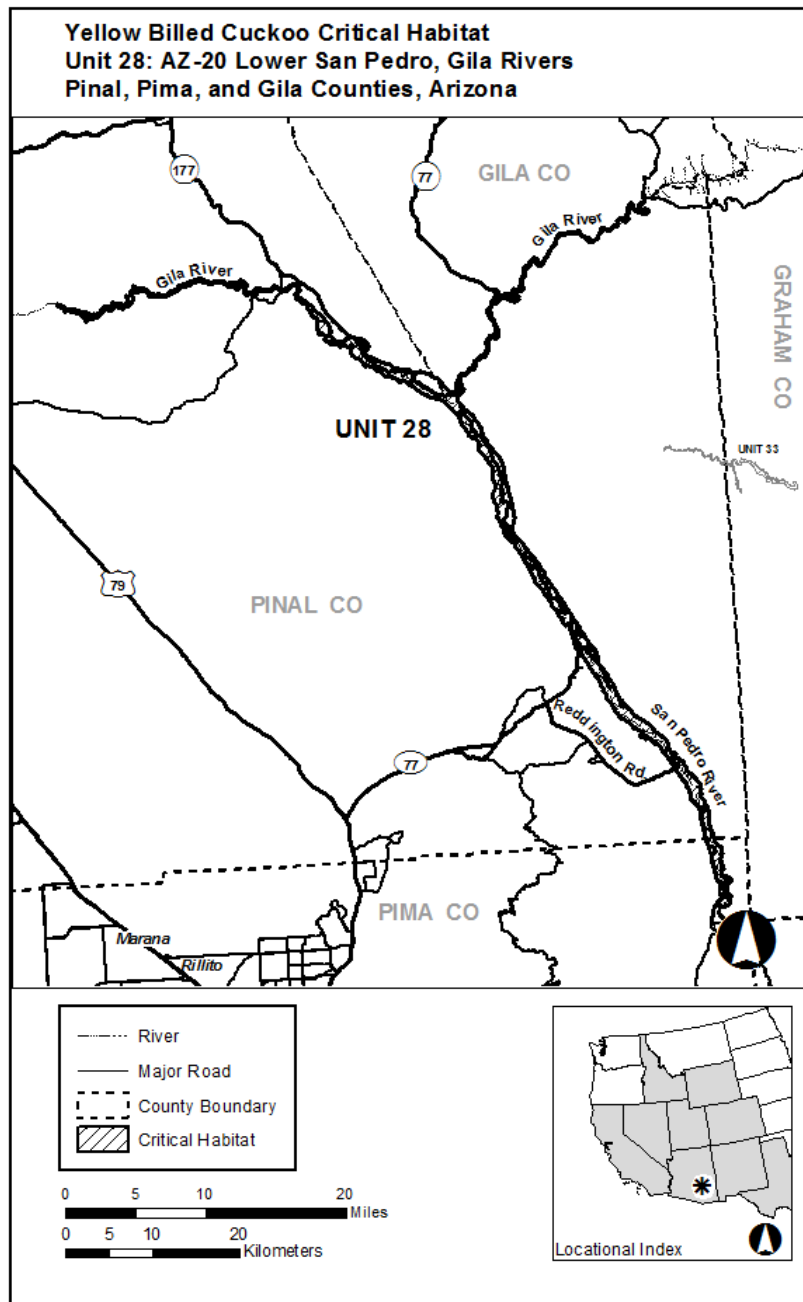
(34) Unit 26: AZ-18, Upper San Pedro River; Cochise County, Arizona. Map of

Units 26 and 27 follows:

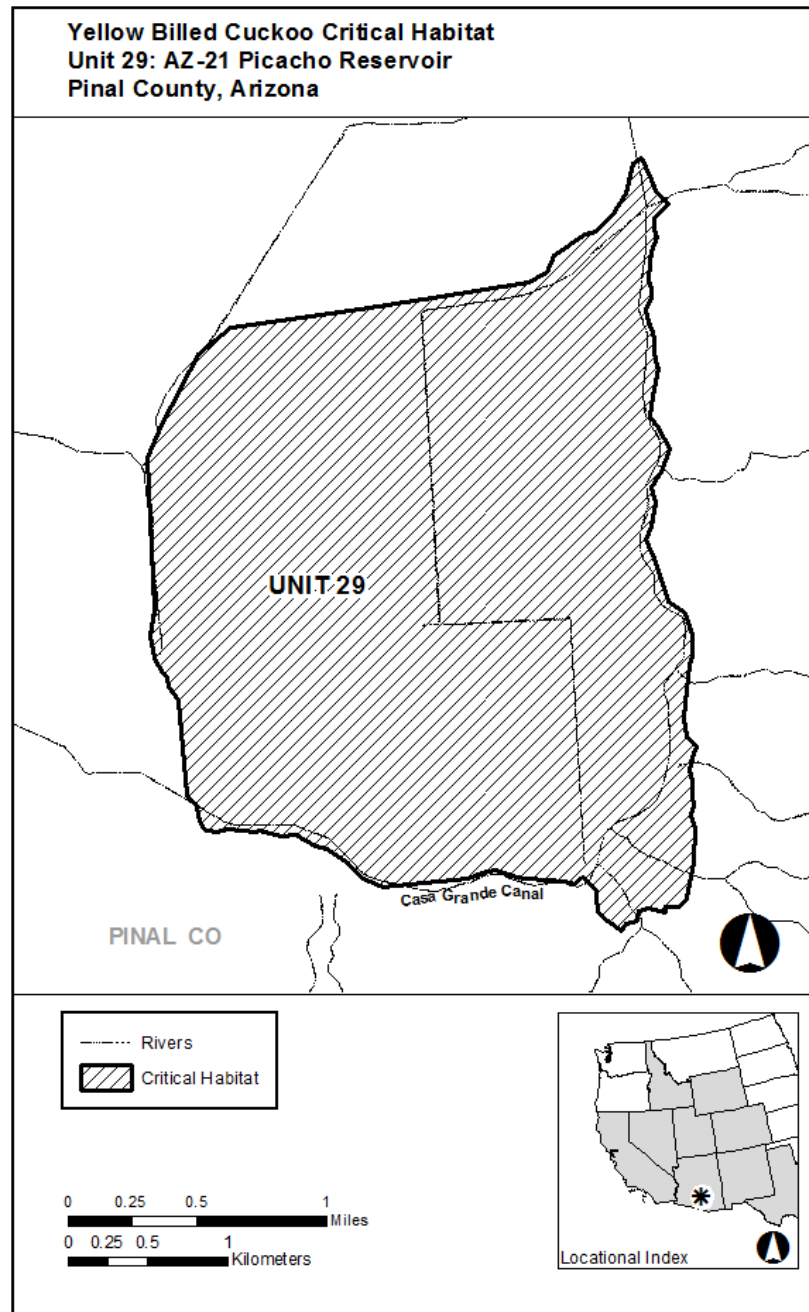


(35) Unit 27: AZ-19, Hooker Hot Springs; Cochise County, Arizona. Map of Unit 27 is provided at paragraph (34) of this entry.

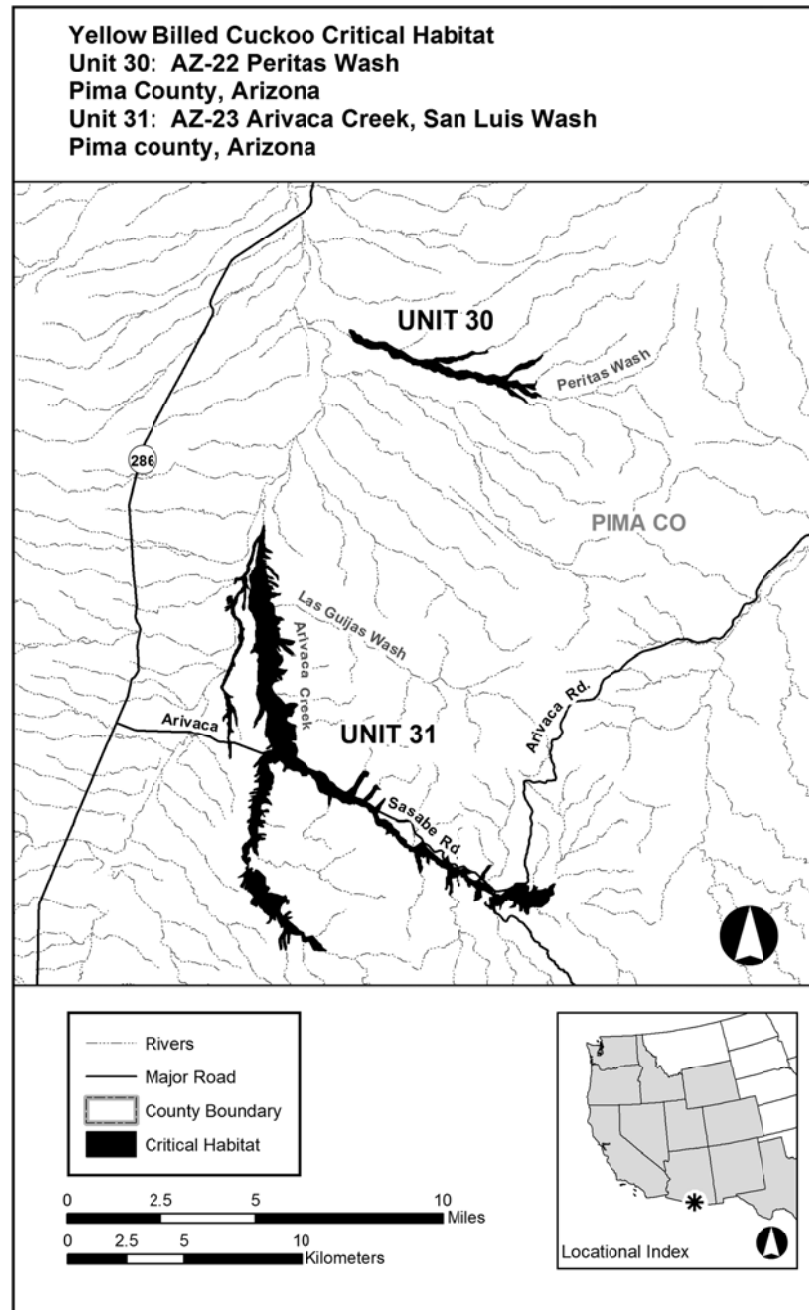
(36) Unit 28: AZ-20, Lower San Pedro River and Gila River; Pima and Pinal Counties, Arizona. Map of Unit 28 follows:



(37) Unit 29: AZ-21, Picacho Reservoir – Flood Control Basin; Pinal County, Arizona. Map of Unit 29 follows:



(38) Unit 30: AZ-22, Peritas Wash; Pima County, Arizona. Map of Units 30 and 31 follows:

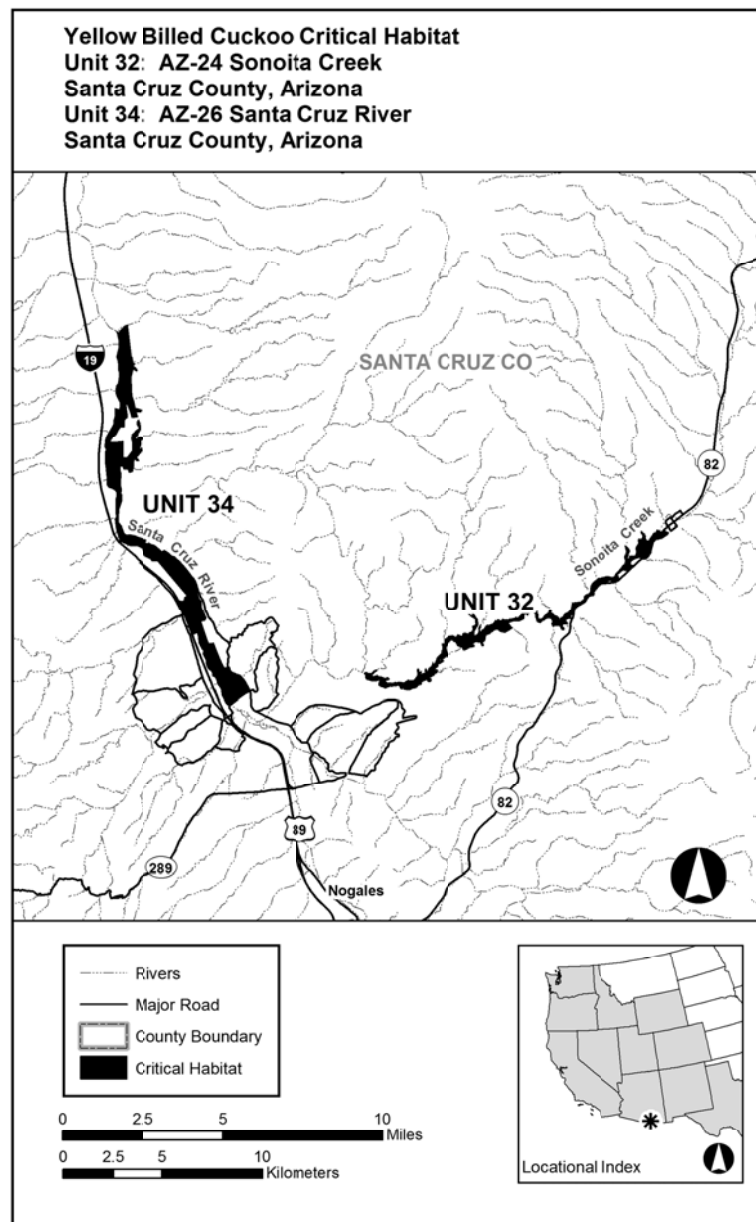




(39) Unit 31: AZ-23, Arivaca Wash and San Luis Wash; Pima County, Arizona.

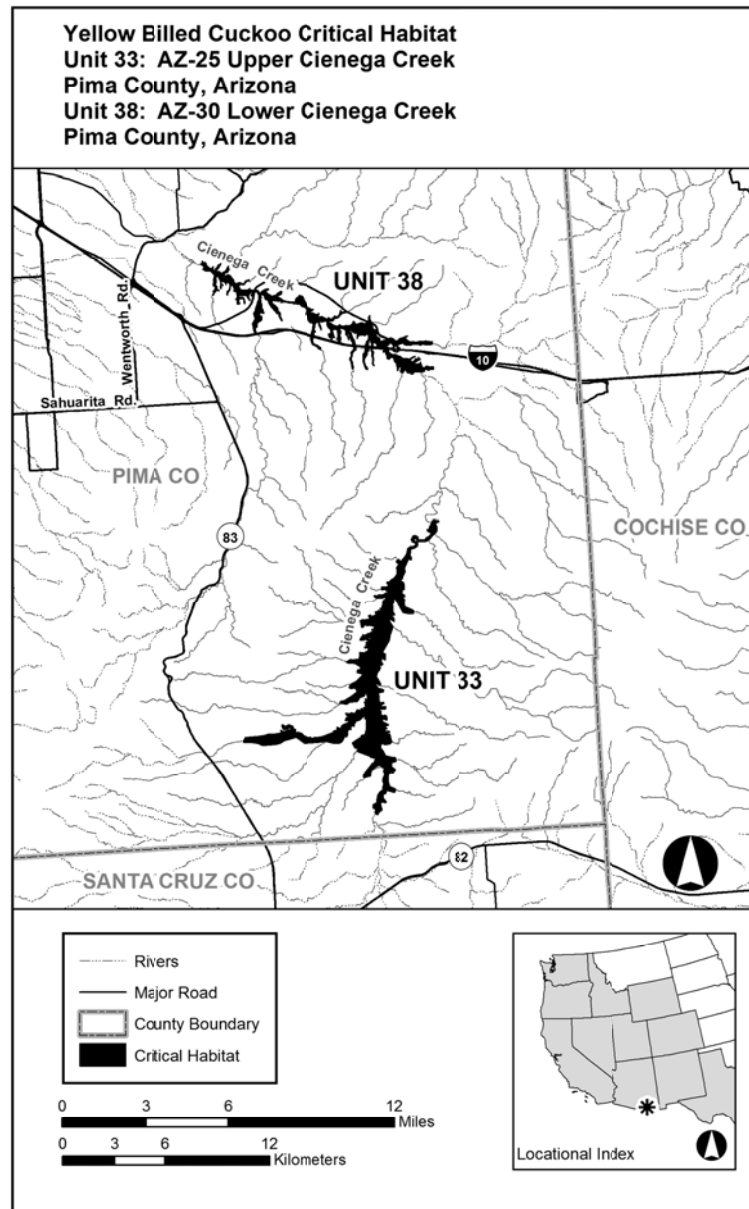
Map of Unit 31 is provided at paragraph (38) of this entry.

(40) Unit 32: AZ-24, Sonoita Creek; Santa Cruz County, Arizona. Map of Units 32 and 34 follows:



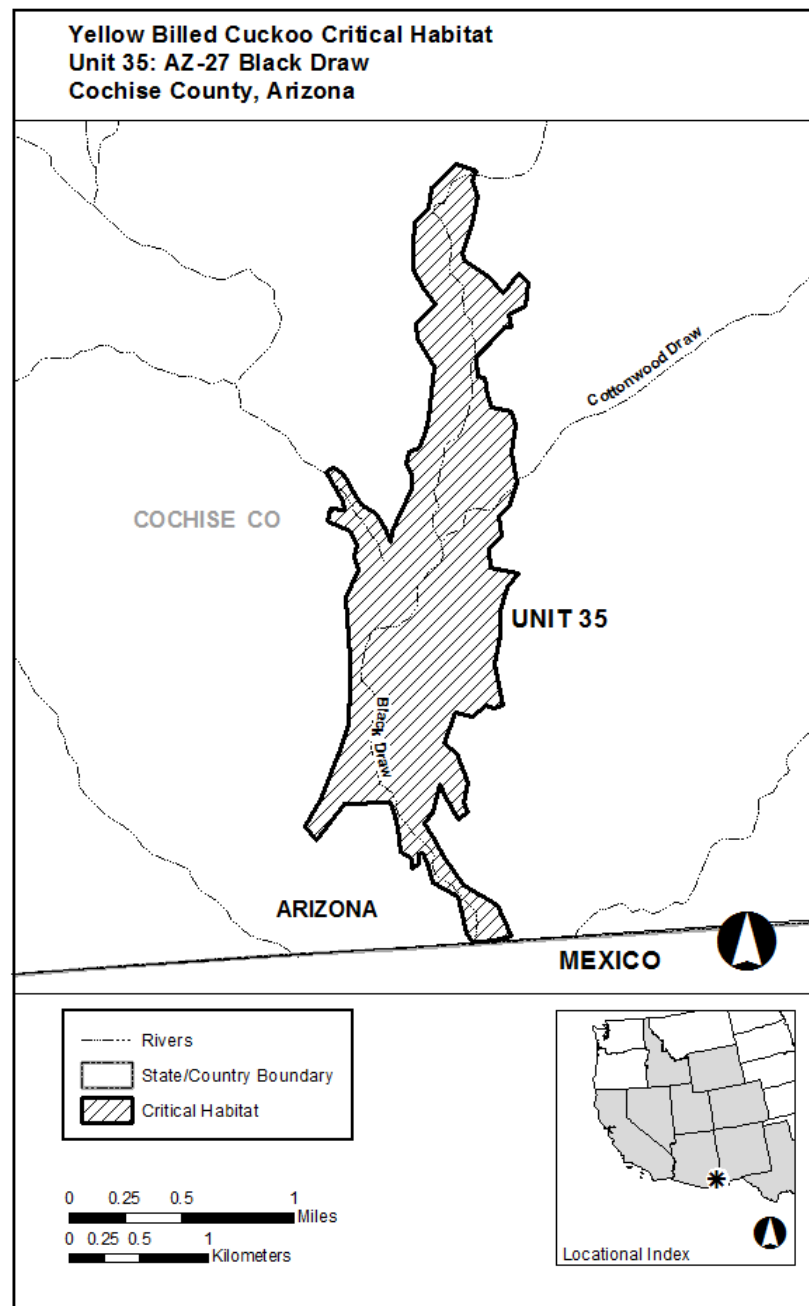
(41) Unit 33: AZ-25, Upper Cienega Creek; Pima County, Arizona. Map of

Units 33 and 38 follows:



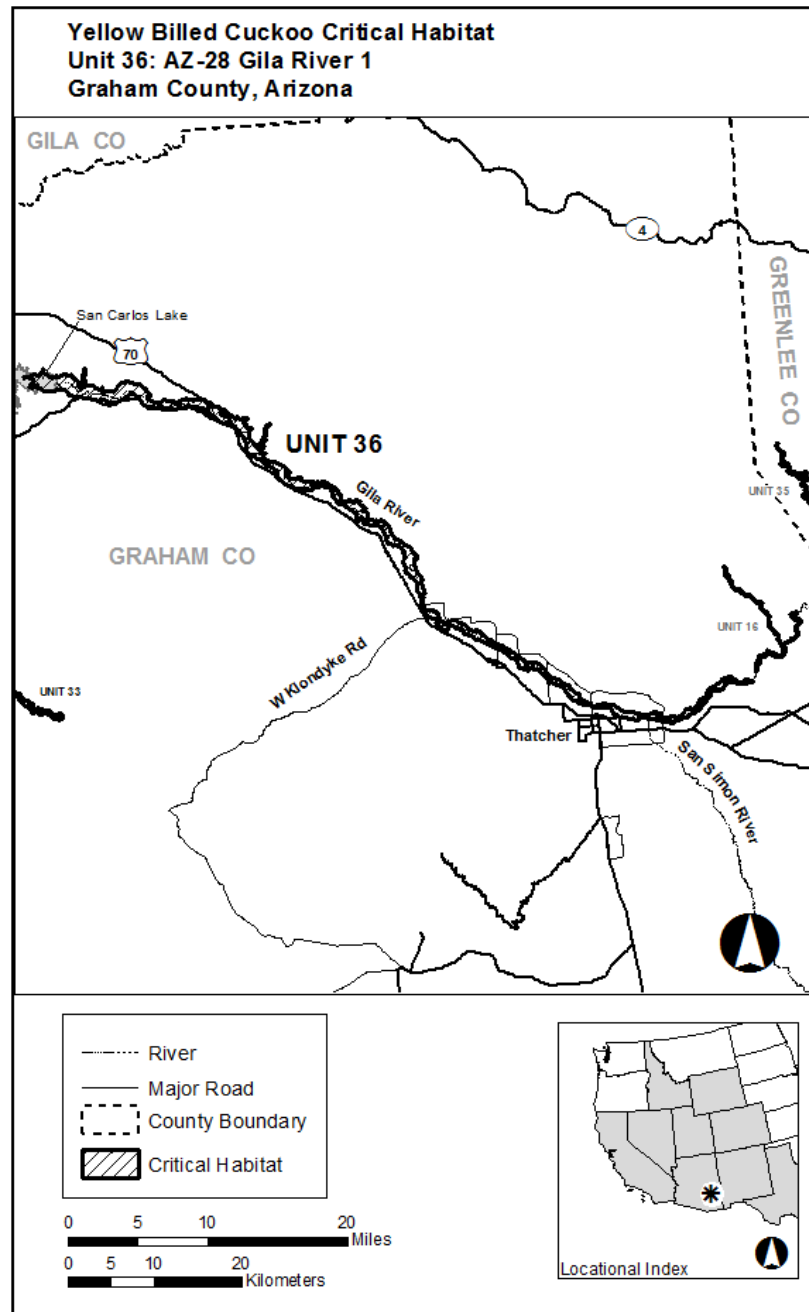
(42) Unit 34: AZ-26, Santa Cruz River; Santa Cruz County, Arizona. Map of Unit 34 is provided at paragraph (40) of this entry.

(43) Unit 35: AZ-27, Black Draw; Cochise County, Arizona. Map of Unit 35 follows:



(44) Unit 36: AZ-28, Gila River 1; Graham County, Arizona. Map of Unit 36

follows:

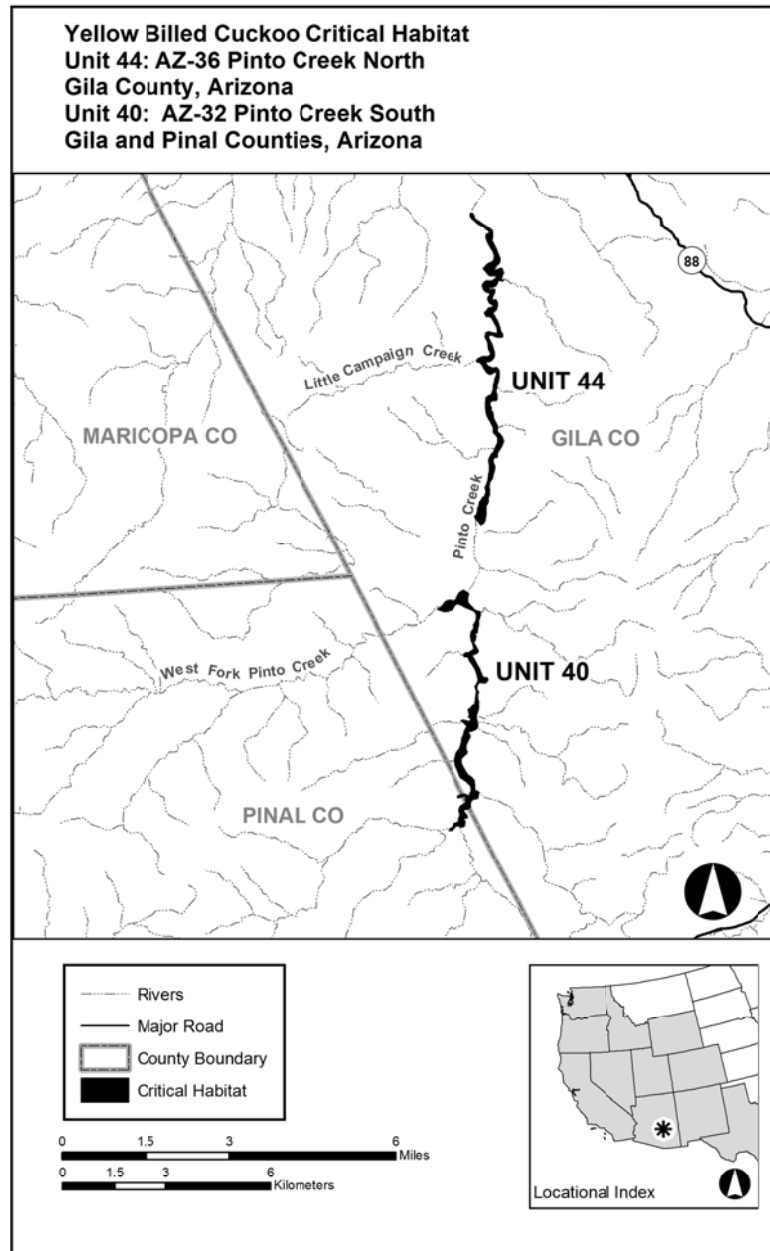


(45) Unit 37: AZ-29, Salt River; Gila County, Arizona. Map of Unit 37 is provided at paragraph (30) of this entry.

(46) Unit 38: AZ-30, Lower Cienega Creek; Pima County, Arizona. Map of Unit 38 is provided at paragraph (41) of this entry.

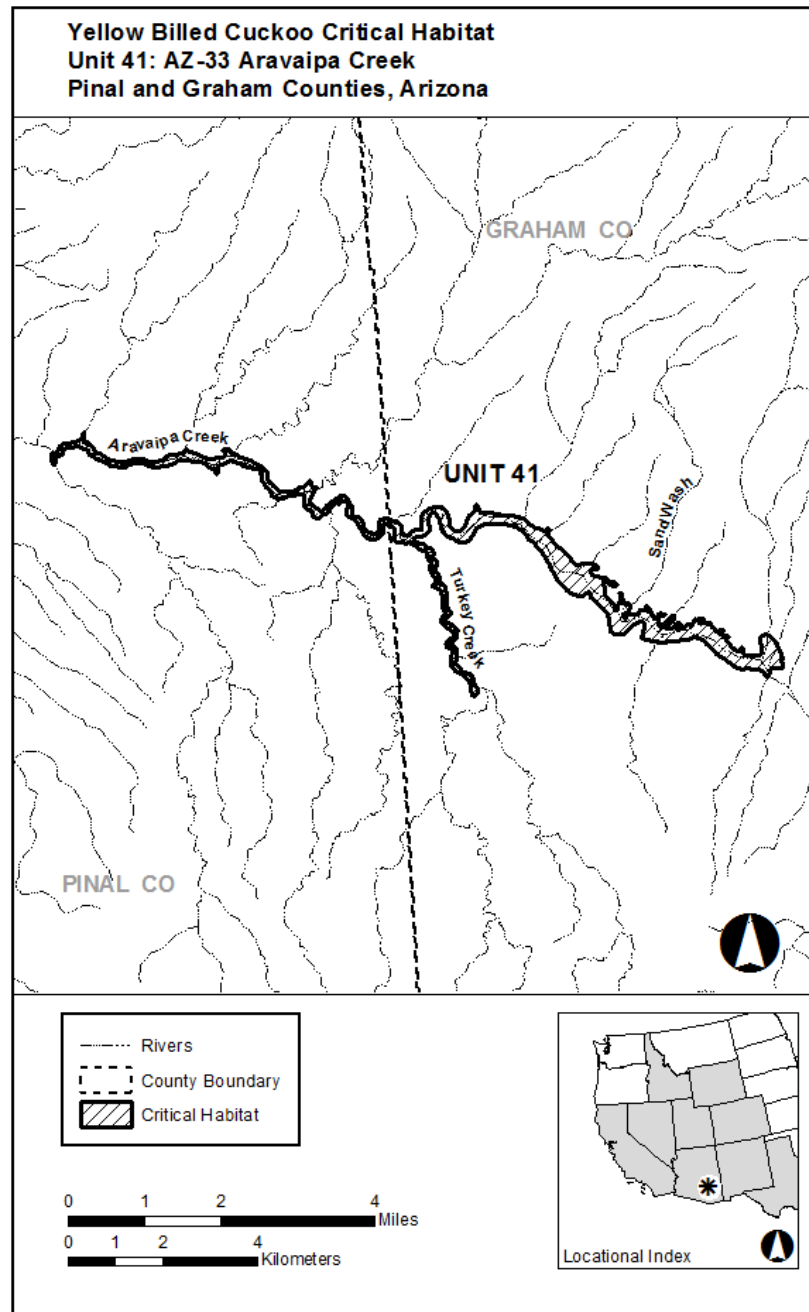
(47) Unit 39: AZ-31, Blue River; Greenlee County, Arizona. Map of Unit 39 is provided at paragraph (33) of this entry.

(48) Unit 40: AZ-32, Pinto Creek South; Gila County, Arizona. Map of Units 40 and 44 follows:



(49) Unit 41: AZ-33, Aravaipa Creek; Pima and Graham Counties, Arizona.

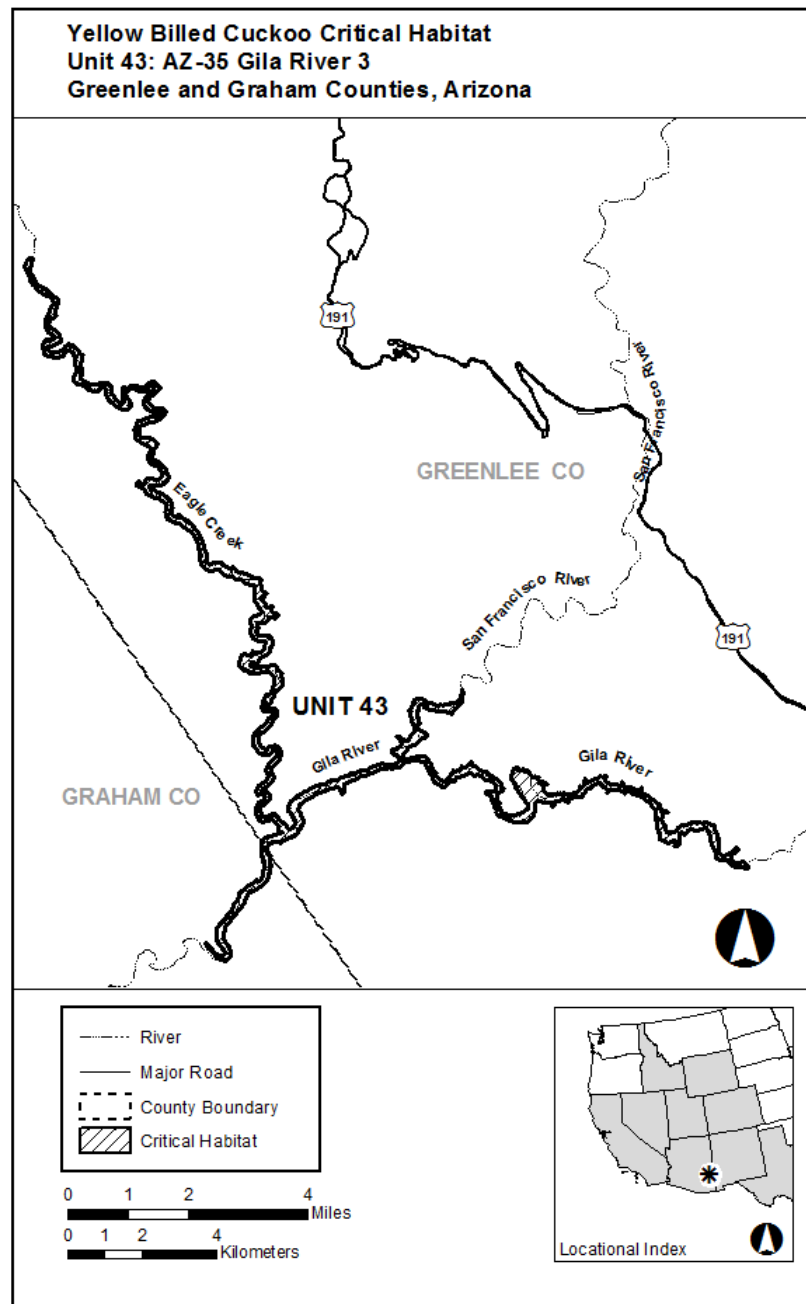
Map of Unit 41 follows:



(50) Unit 42: AZ-34, Lower Verde River; Maricopa County, Arizona. Map of Unit 42 is provided at paragraph (29) of this entry.

(51) Unit 43: AZ-35, Gila River 3; Graham and Greenlee Counties, Arizona.

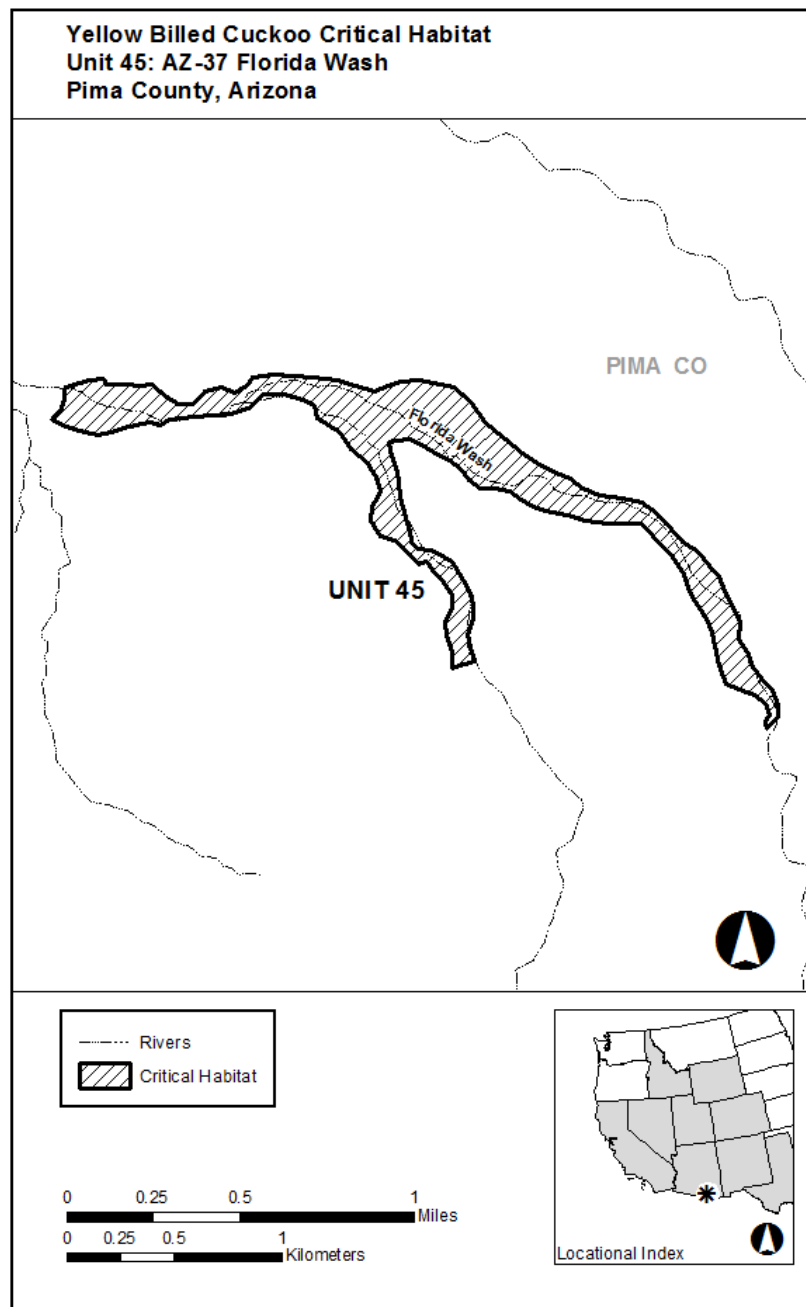
Map of Unit 43 follows:





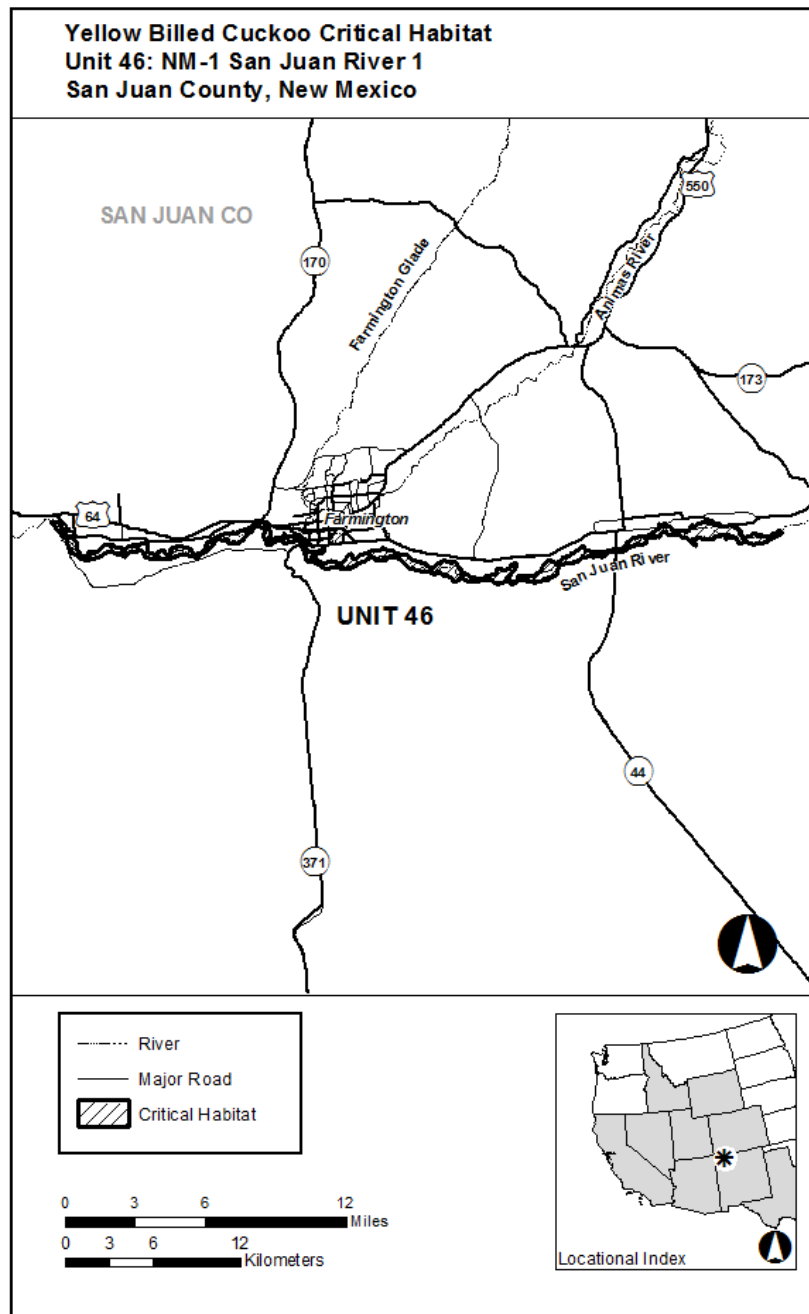
(52) Unit 44: AZ-36, Pinto Creek North; Gila County, Arizona. Map of Unit 44 is provided at paragraph (48) of this entry.

(53) Unit 45: AZ-37, Florida Wash; Pima County, Arizona. Map of Unit 45 follows:

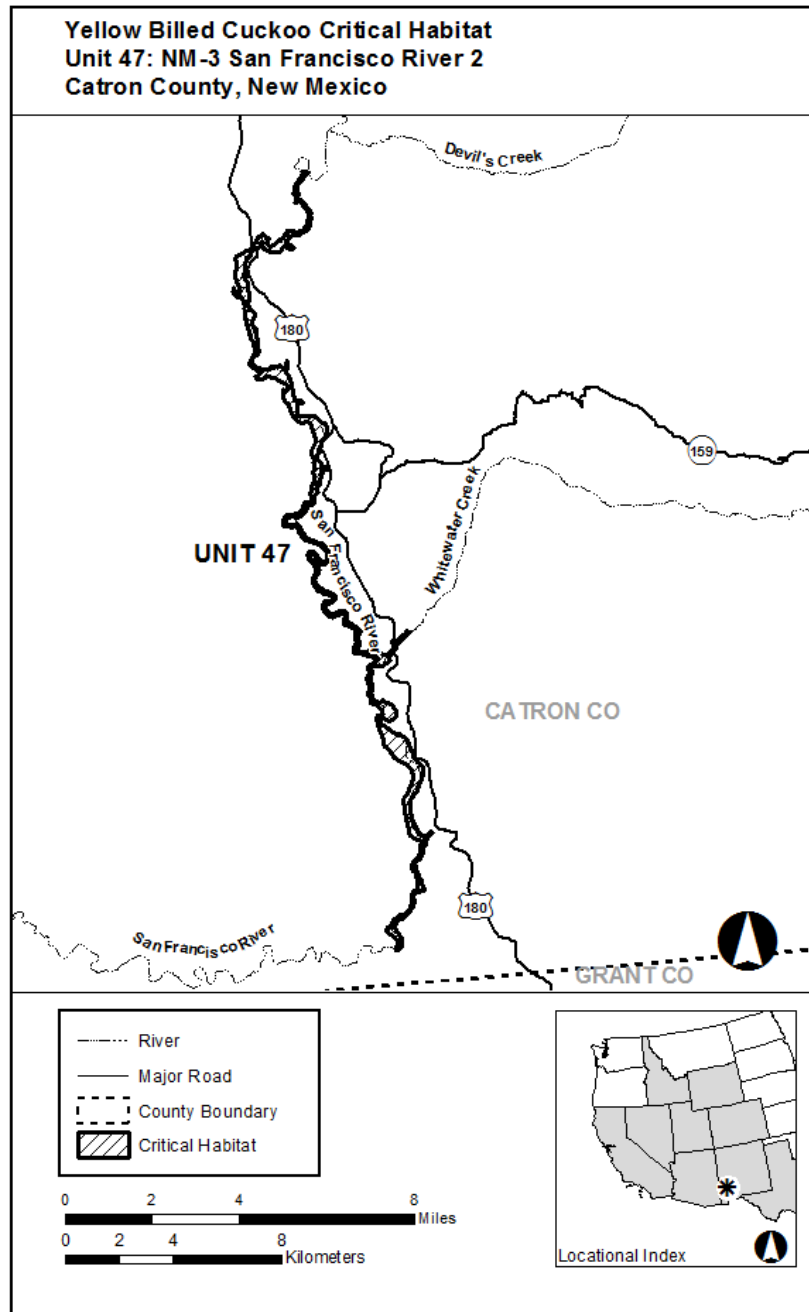


(54) Unit 46: NM-1, San Juan River 1; San Juan County, New Mexico. Map of

Unit 45 follows:

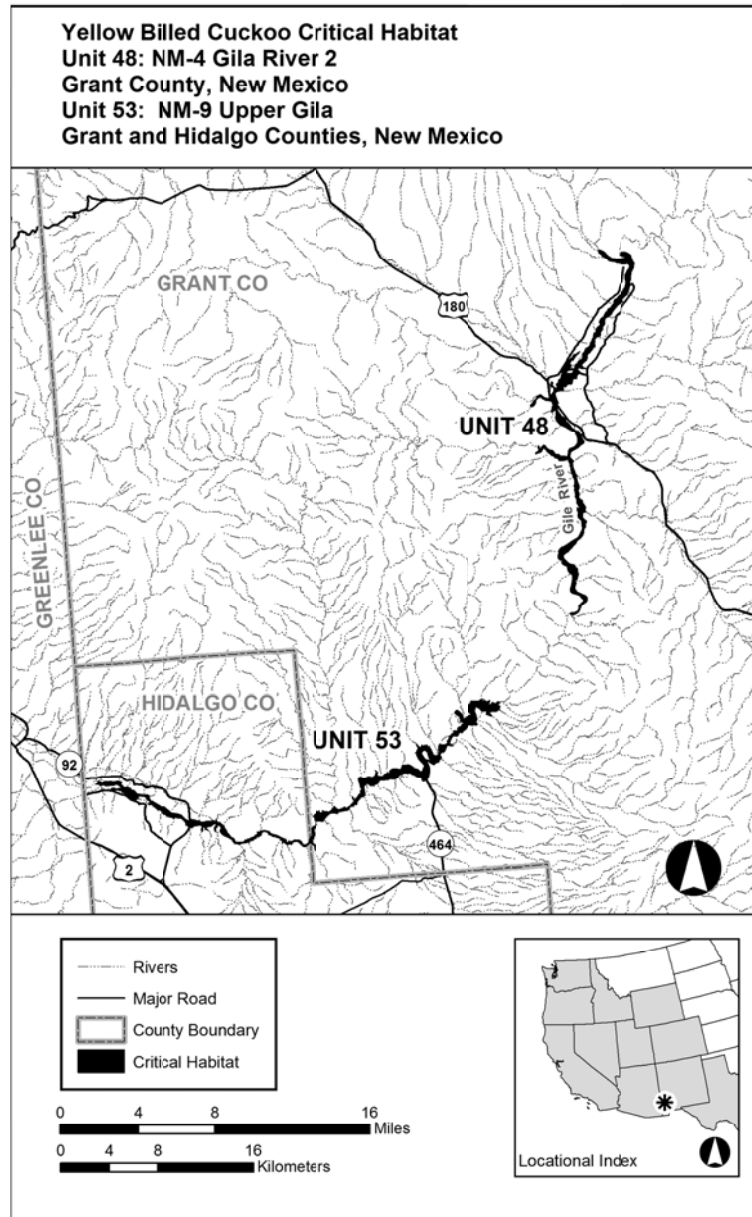


(55) Unit 47: NM-3, San Francisco River 2; Catron County, New Mexico. Map of Unit 47 follows:

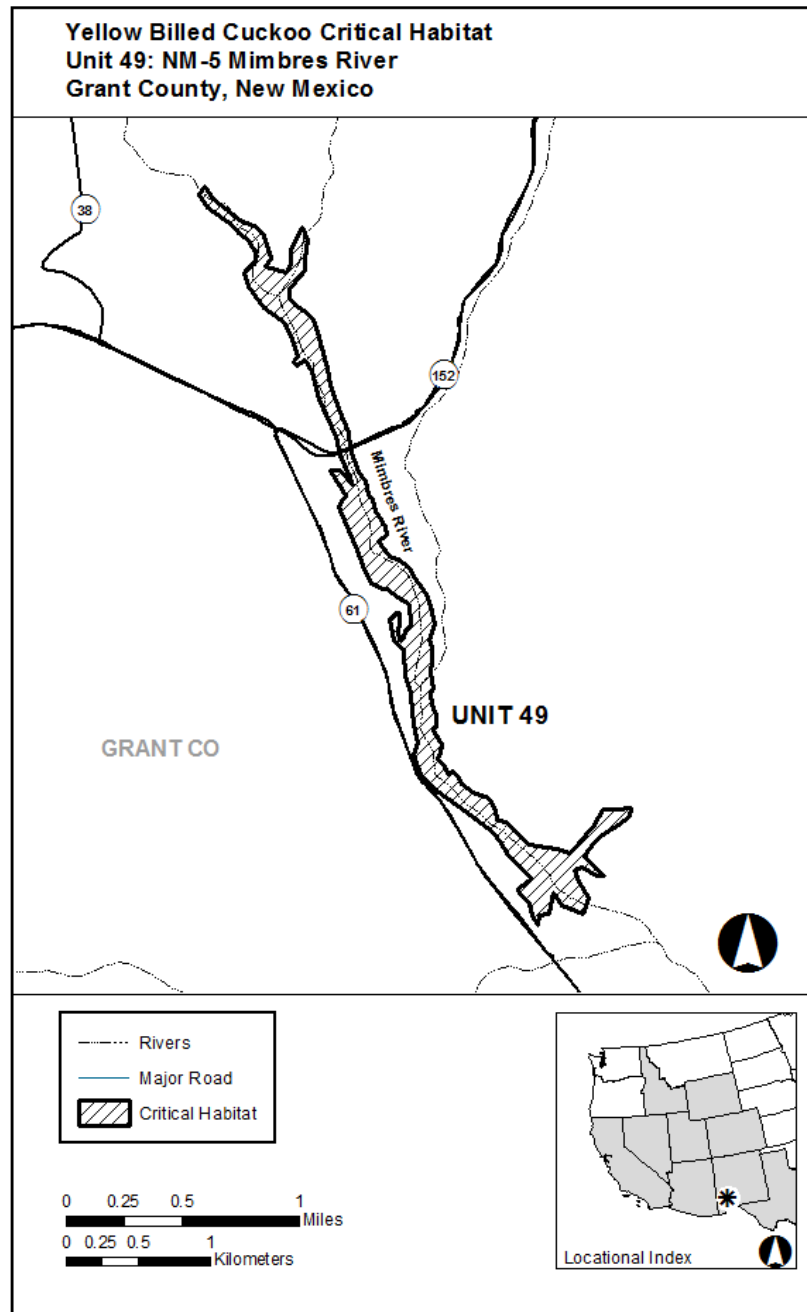


(56) Unit 48: NM-4, Gila River 2; Grant and Hidalgo Counties, New Mexico.

Map of Units 48 and 53 follows:

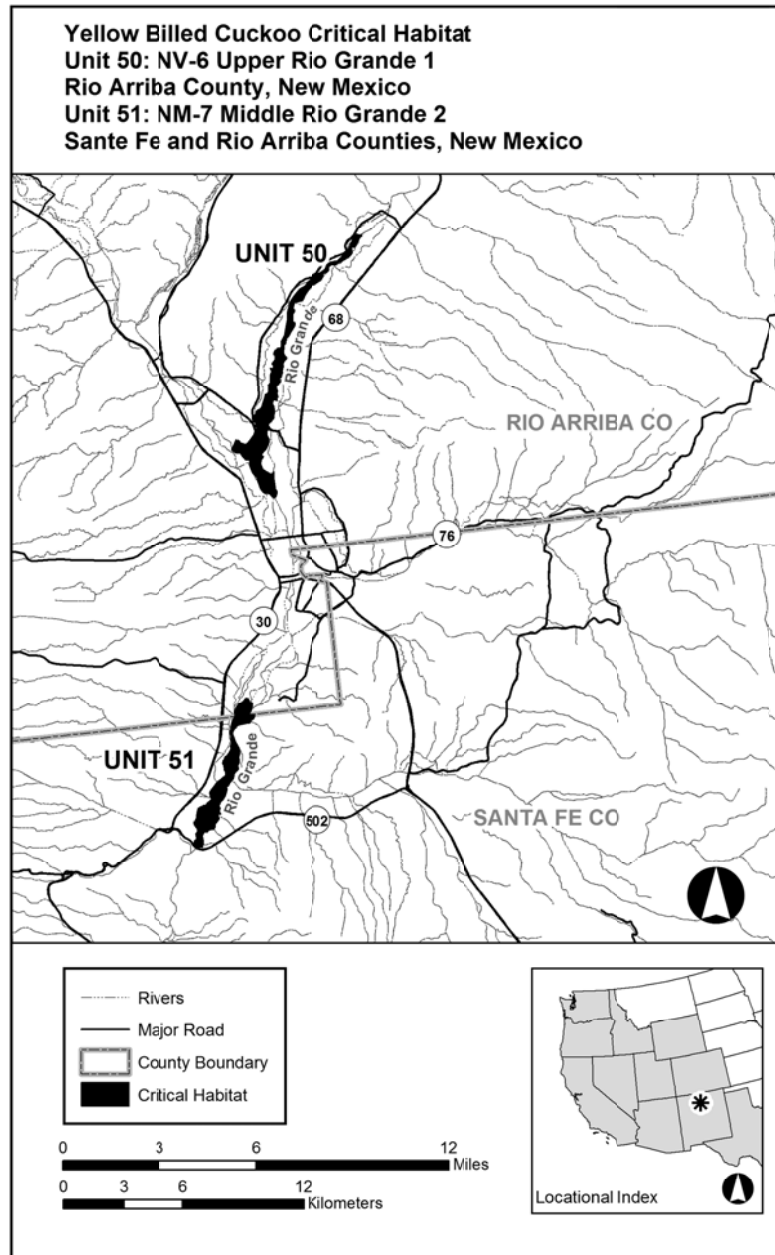


(57) Unit 49: NM-5, Mimbres River; Grant County, New Mexico. Map of Unit 49 follows:



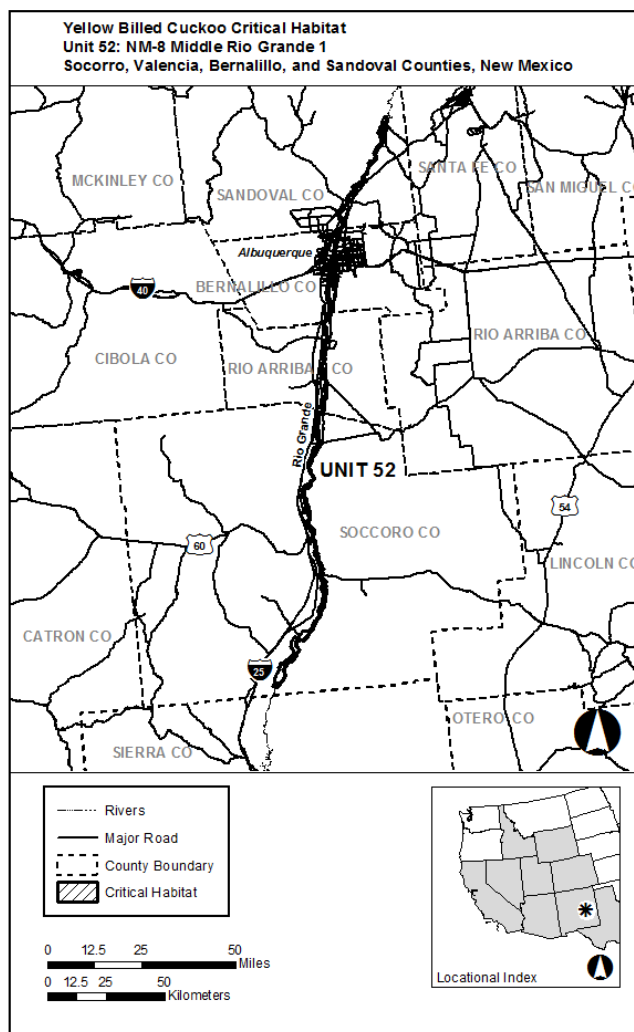
(58) Unit 50: NM-6, Upper Rio Grande 1; Rio Arriba County, New Mexico.

Map of Units 50 and 51 follows:



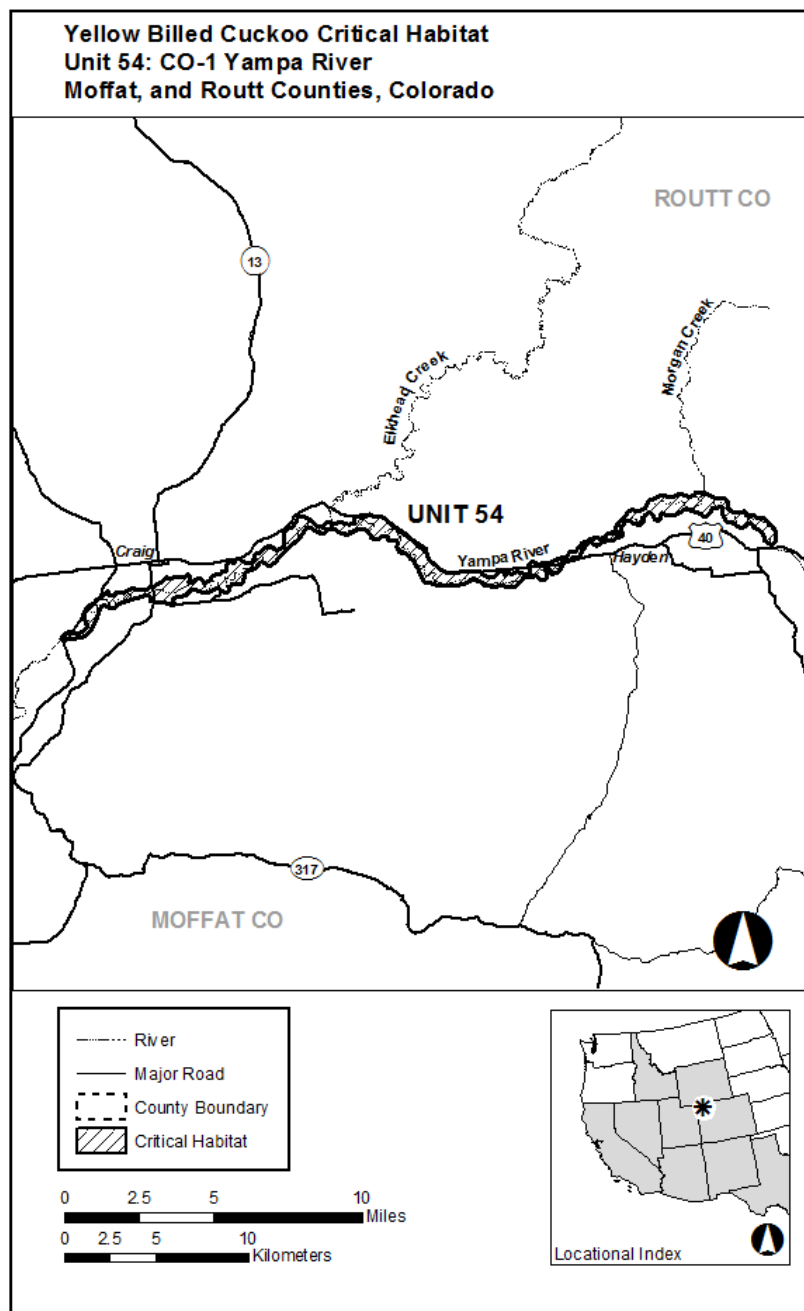
(59) Unit 51: NM-7, Upper Rio Grande 2; Santa Fe and Rio Arriba Counties, New Mexico. Map of Unit 51 is provided at paragraph (58) of this entry.

(60) Unit 52: NM-8, Middle Rio Grande 1; Sierra, Socorro, Valencia, Bernalillo, and Sandoval Counties, New Mexico. Map of Unit 52 follows:



(61) Unit 53: NM-9, Upper Gila River; Grant County, New Mexico. Map of Unit 53 is provided at paragraph (56) of this entry.

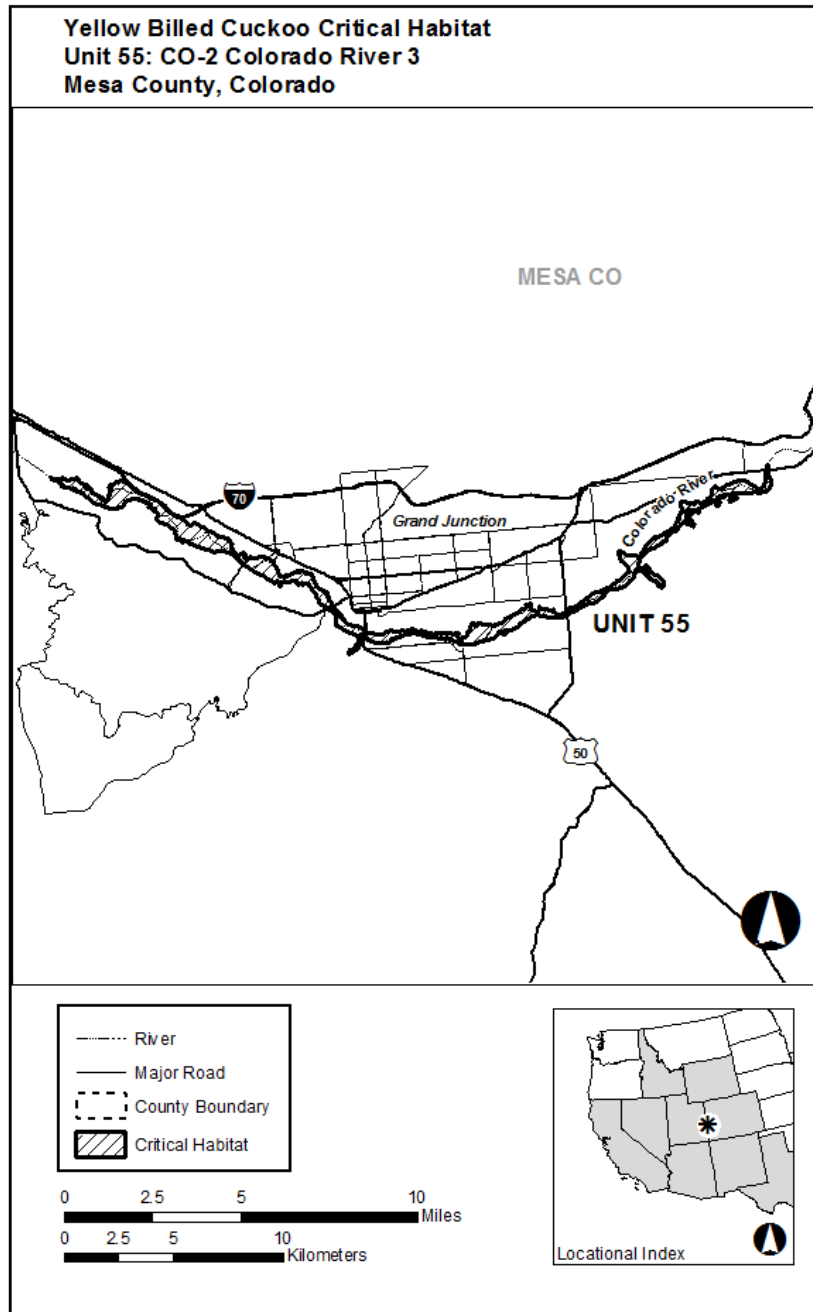
(62) Unit 54: CO-1, Yampa River; Moffat and Routt Counties, Colorado. Map of Unit 54 follows:



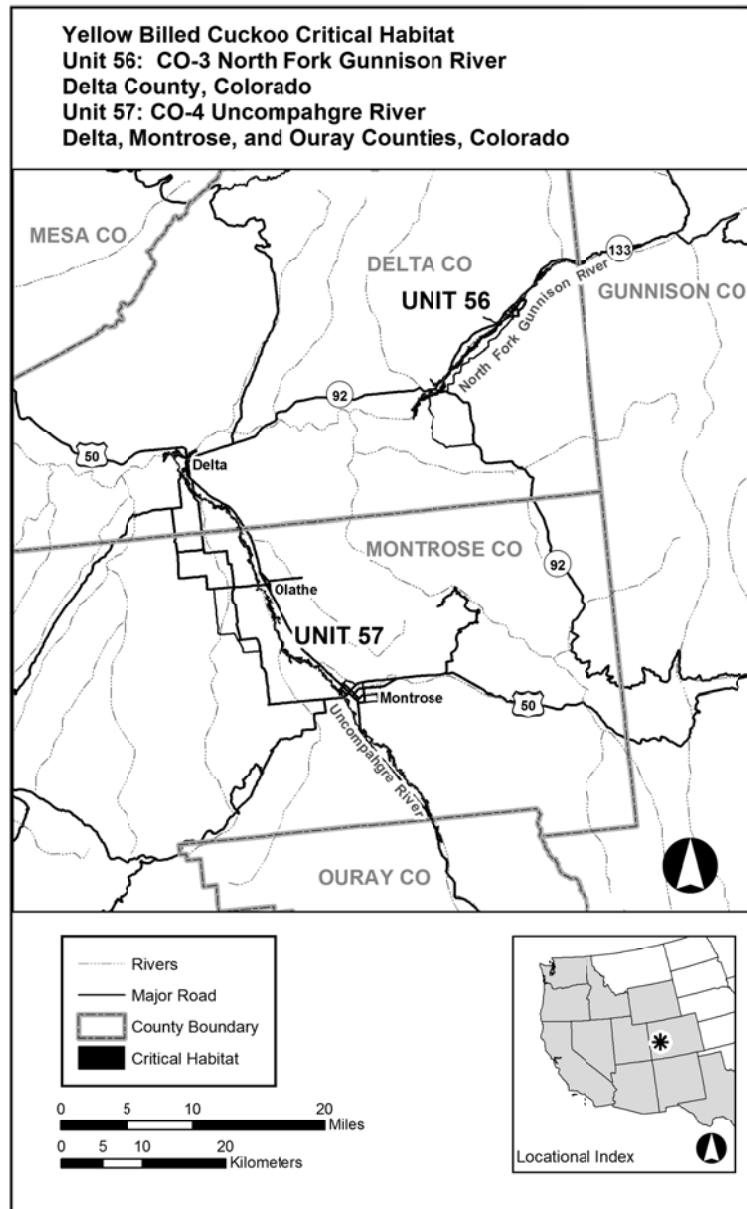


(63) Unit 55: CO-2, Colorado River 3; Mesa County, Colorado. Map of Unit 55

follows:

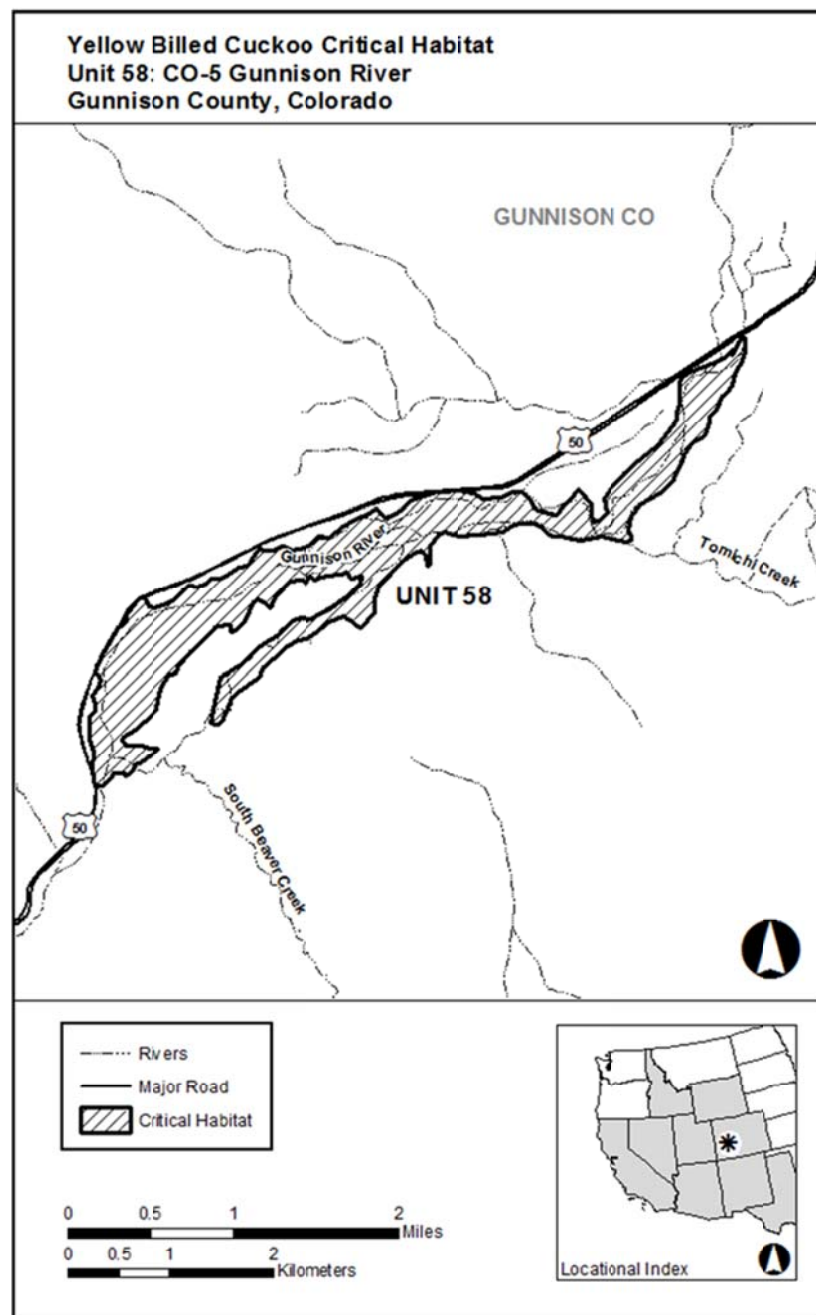


(64) Unit 56: CO-3, North Fork Gunnison River; Delta County, Colorado. Map of Units 56 and 57 follows:

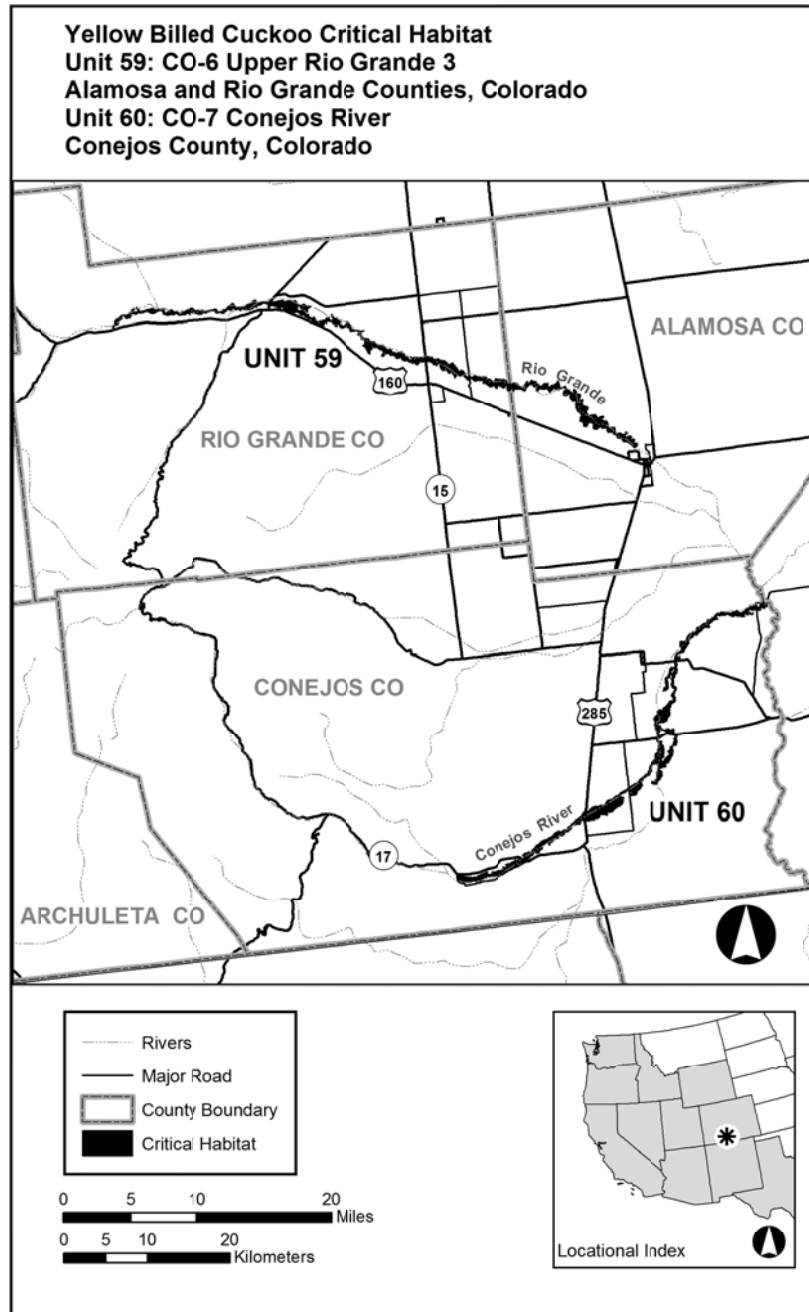


(65) Unit 57: CO-4, Uncompahgre River; Delta, Montrose, and Ouray Counties, Colorado. Map of Unit 57 is provided at paragraph (64) of this entry.

(66) Unit 58: CO-5, Gunnison River; Gunnison County, Colorado. Map of Unit 58 follows:

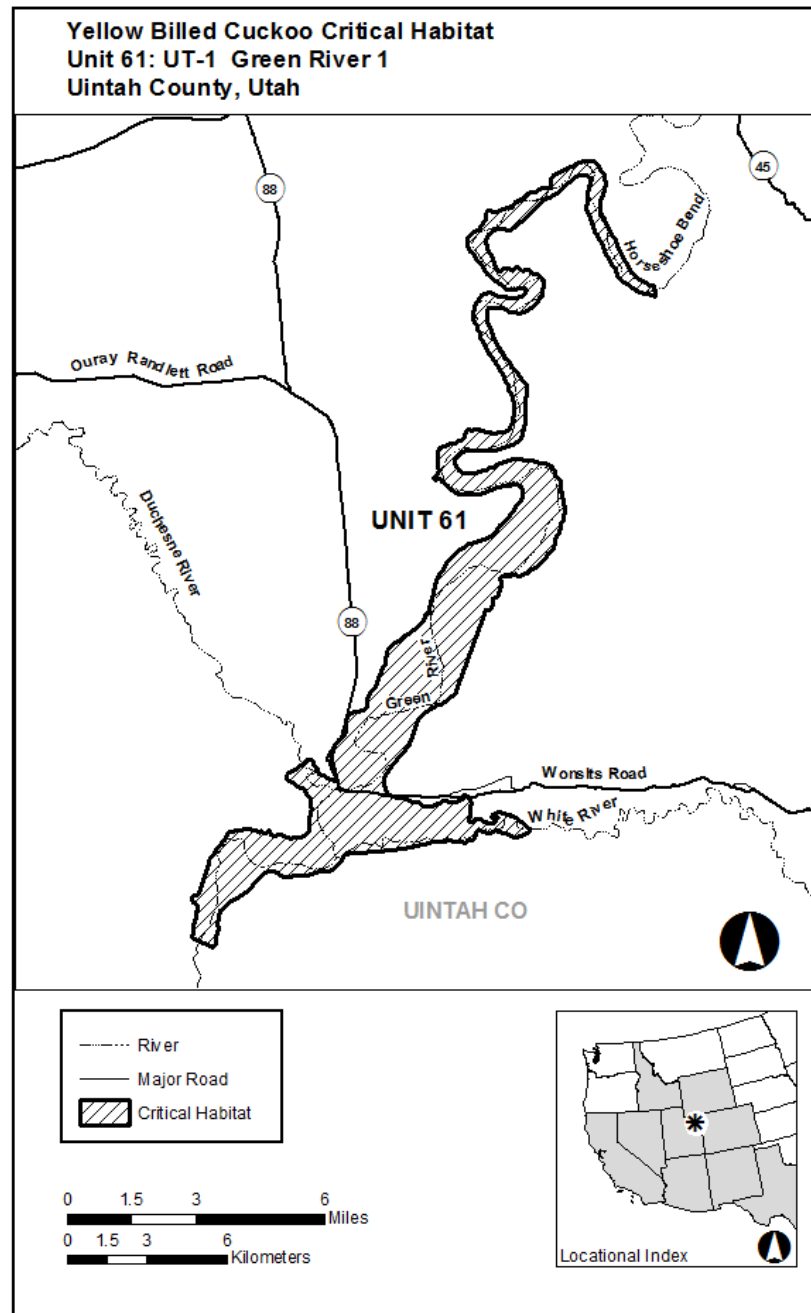


(67) Unit 59: CO-6, Upper Rio Grande 3; Alamosa and Rio Grande Counties, Colorado. Map of Units 59 and 60 follows:

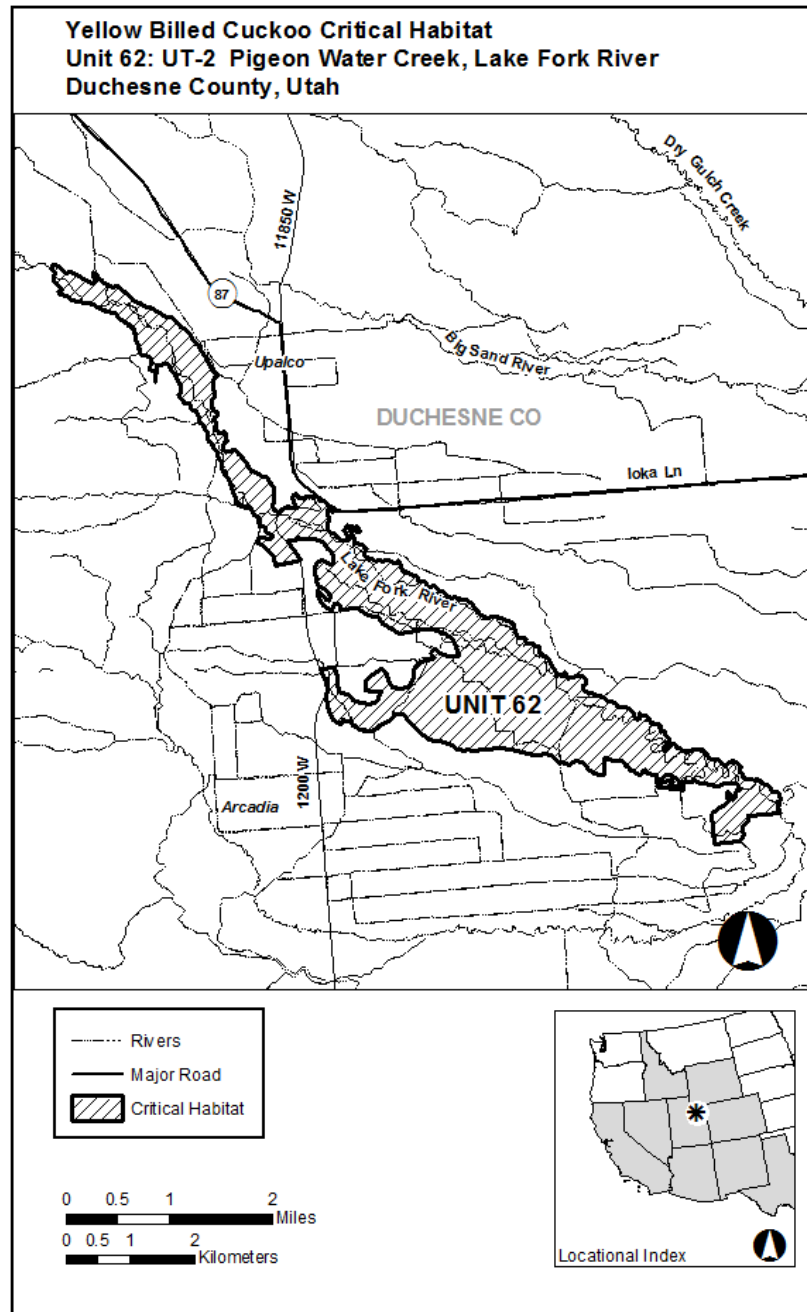


(68) Unit 60: CO-7, Conejos River; Conejos County, Colorado. Map of Unit 60 is provided at paragraph (67) of this entry.

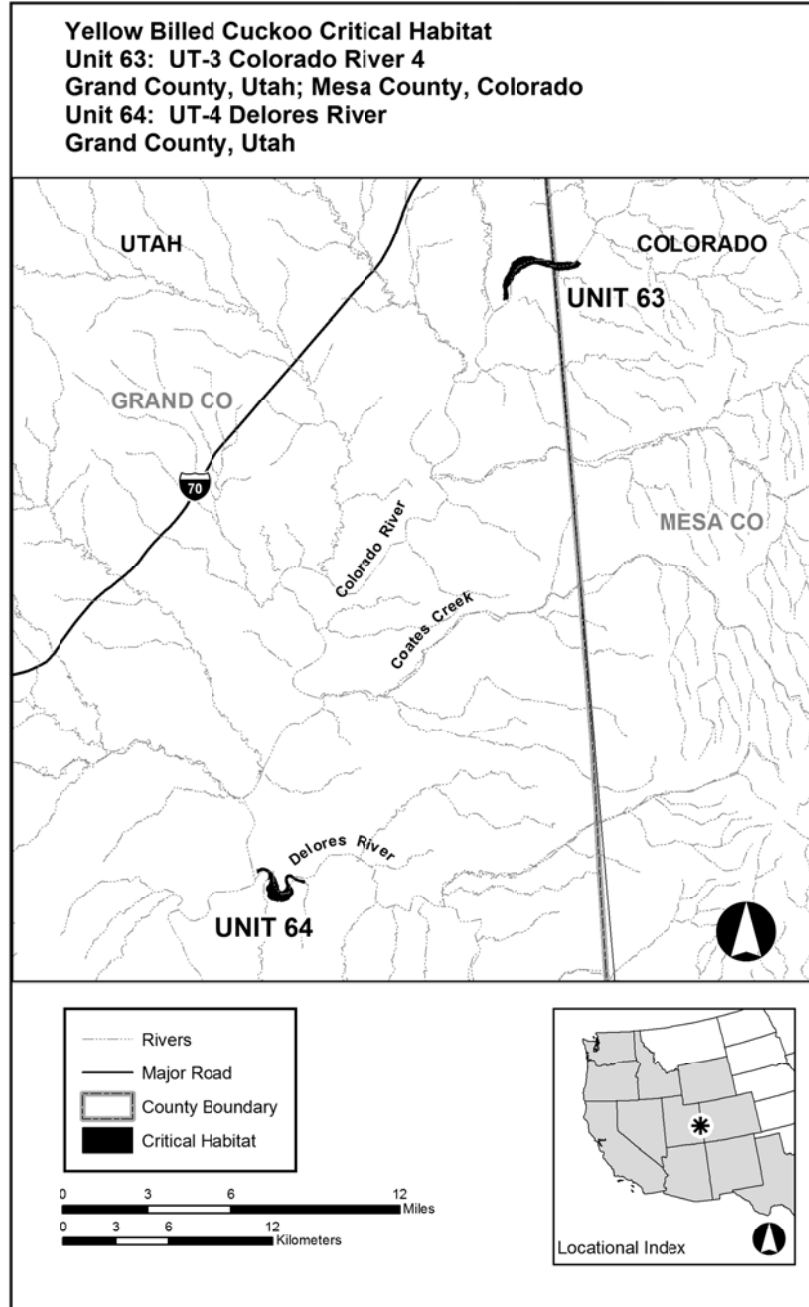
(69) Unit 61: UT-1, Green River 1; Uintah County, Utah. Map of Unit 61 follows:



(70) Unit 62: UT-2, Pigeon Water Creek and Lake Fork River; Duchesne County, Utah. Map of Unit 62 follows:

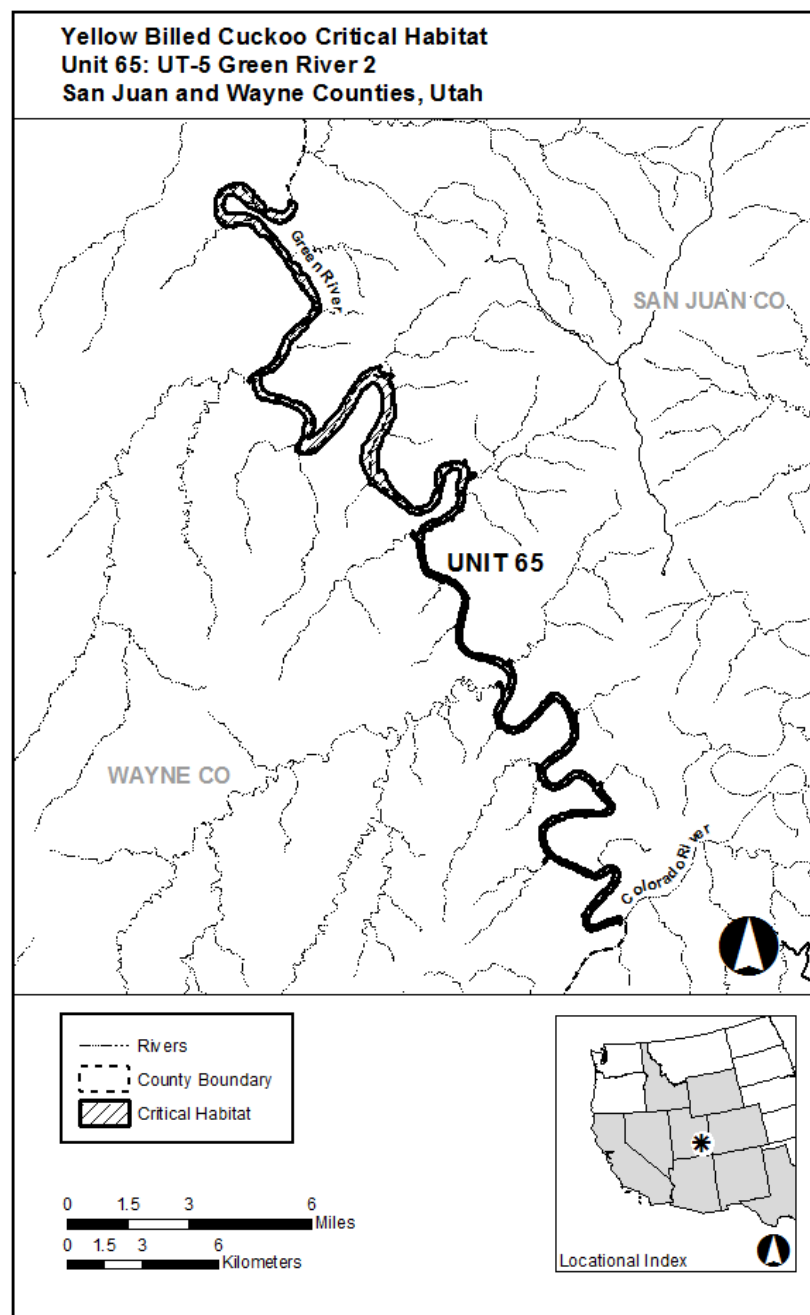


(71) Unit 63: UT-3, Colorado River 4; Mesa County, Colorado, and Grand County, Utah. Map of Units 63 and 64 follows:



(72) Unit 64: UT-4, Dolores River; Grand County, Utah. Map of Unit 64 is provided at paragraph (71) of this entry.

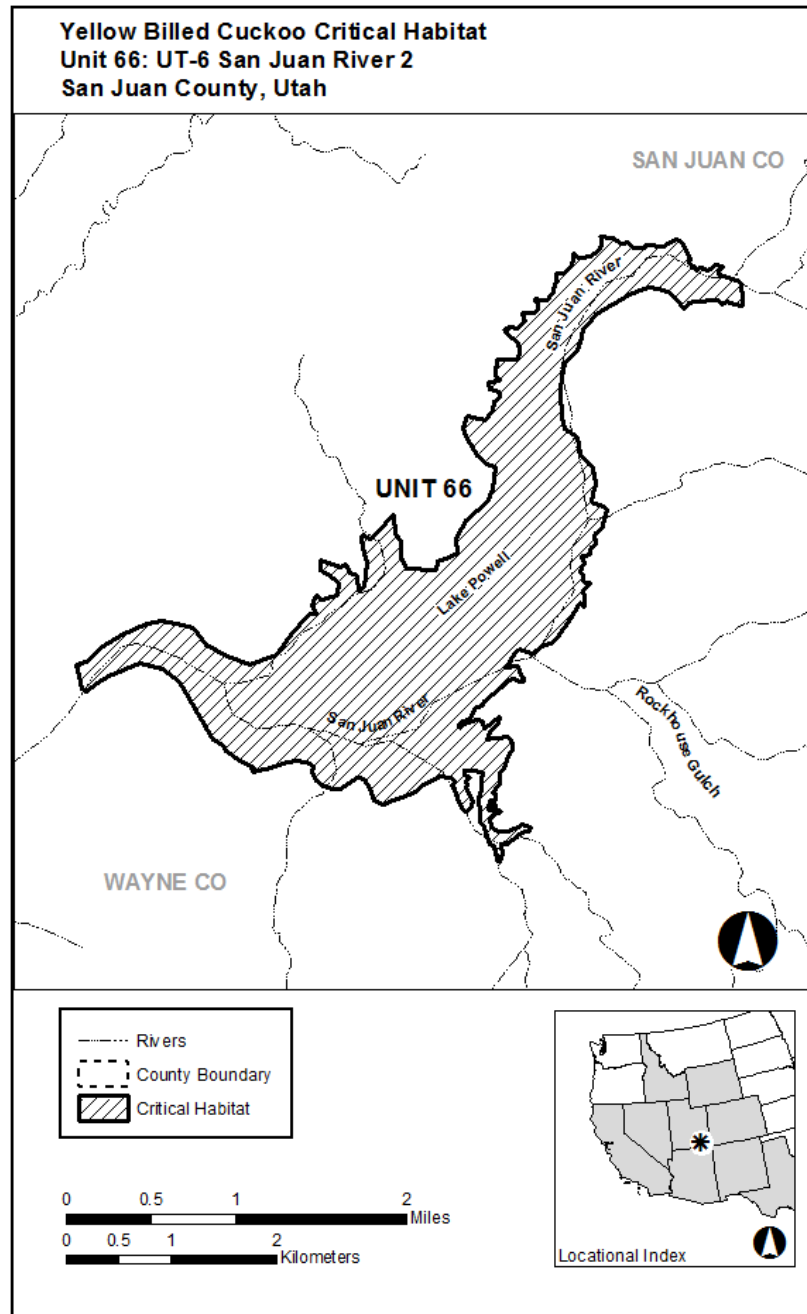
(73) Unit 65: UT-5, Green River 2; San Juan and Wayne Counties, Utah. Map of Unit 65 follows:





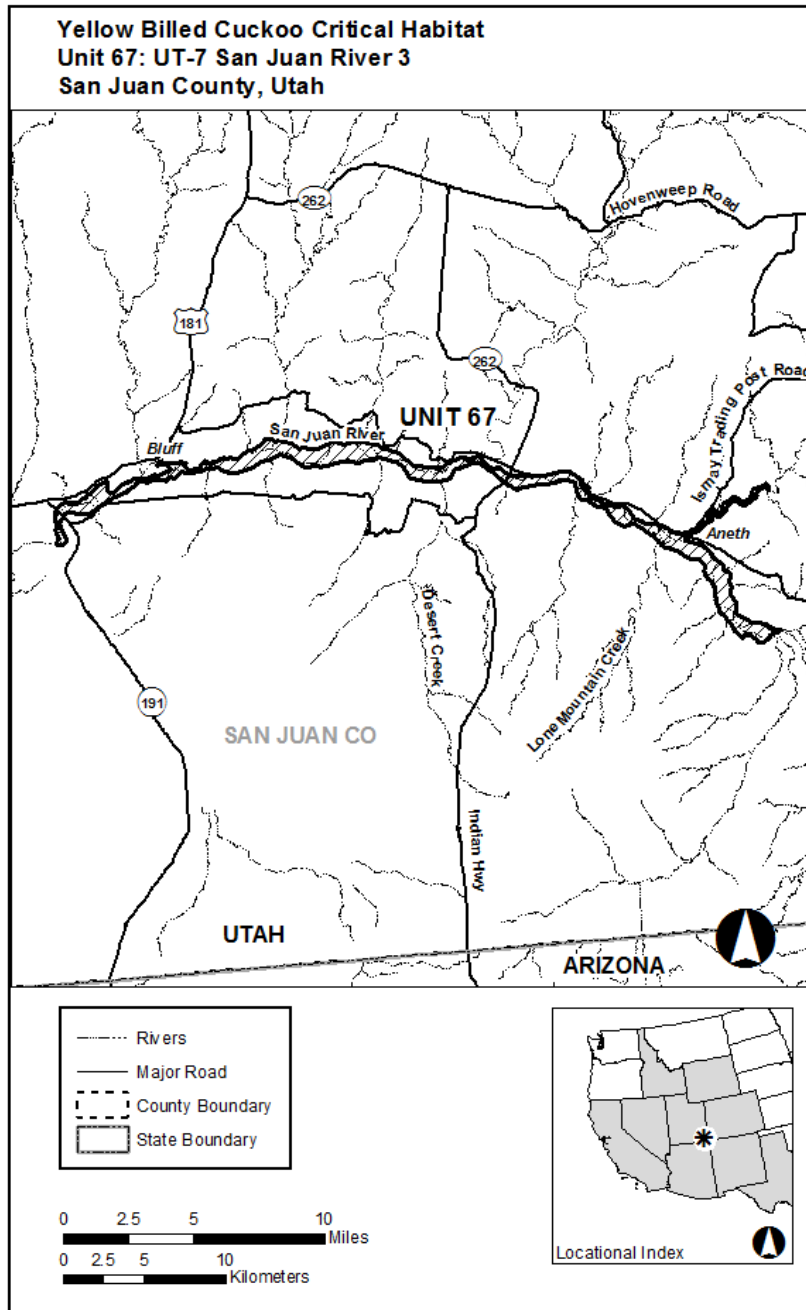
(74) Unit 66: UT-6, San Juan River 2; San Juan County, Utah. Map of Unit 66

follows:



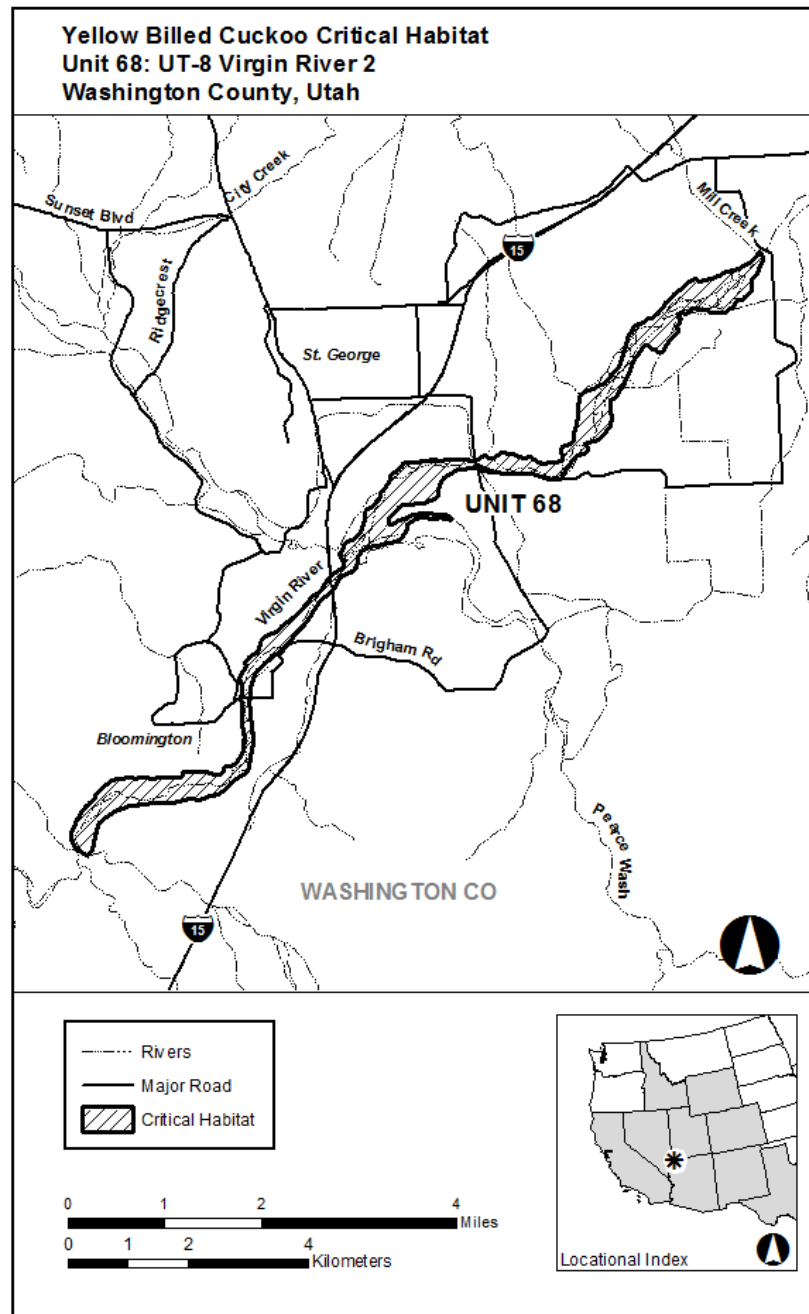
(75) Unit 67: UT-7, San Juan River 3; San Juan County, Utah. Map of Unit 67

follows:

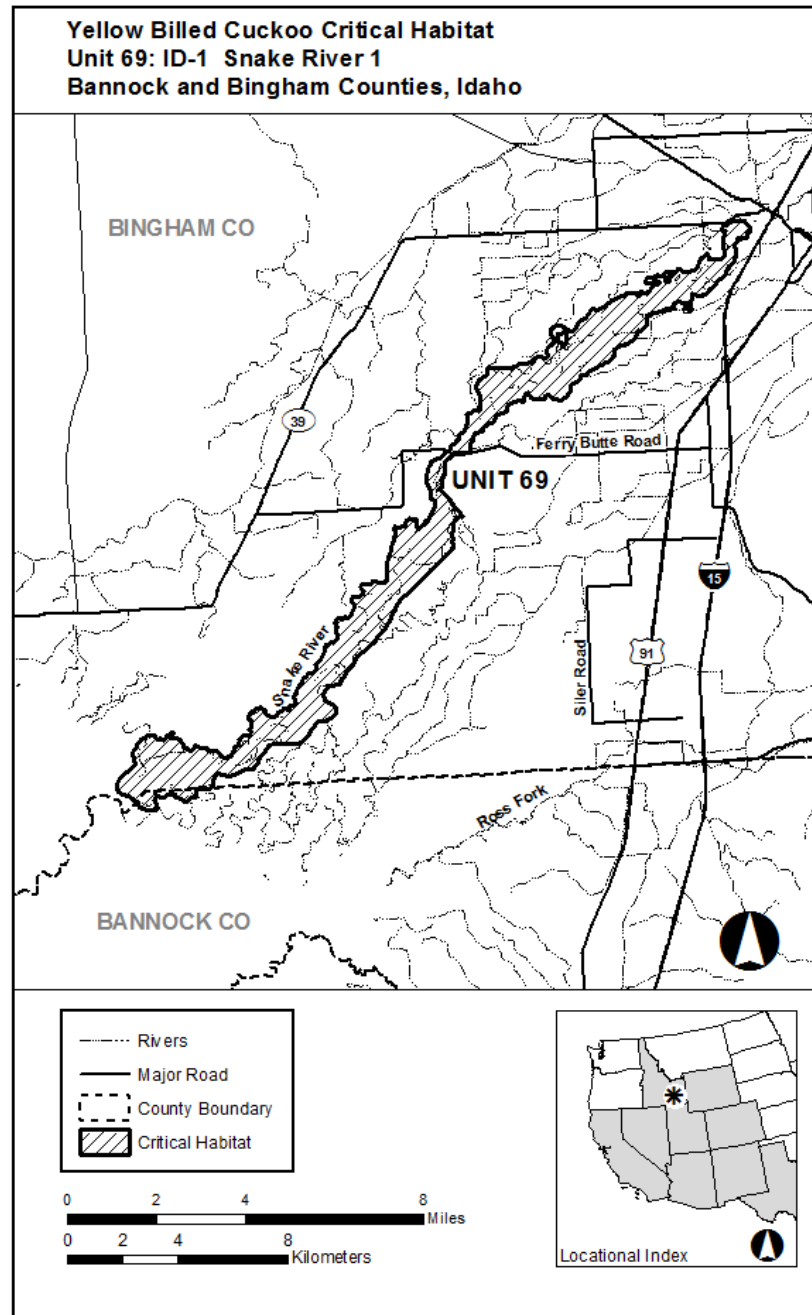


(76) Unit 68: UT-8, Virgin River 2; Washington County, Utah. Map of Unit 68

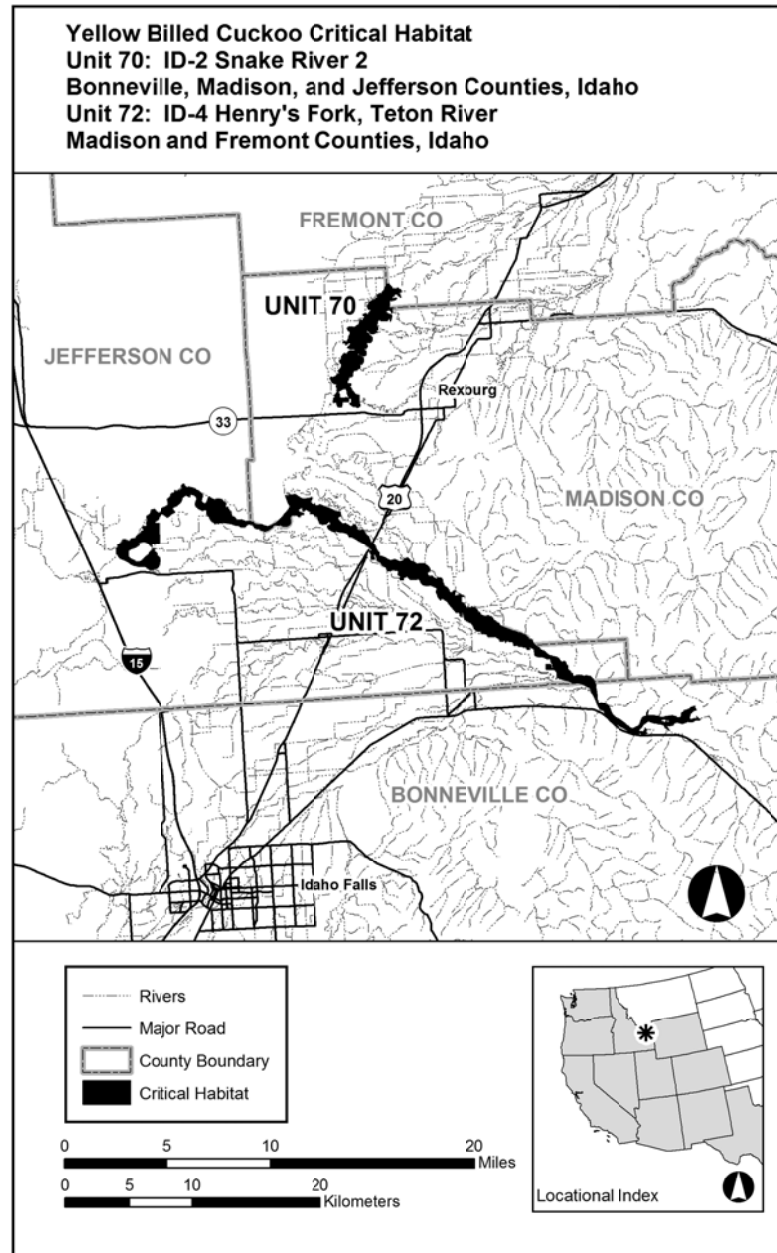
follows:



(77) Unit 69: ID-1, Snake River 1; Bannock and Bingham Counties, Idaho. Map of Unit 69 follows:

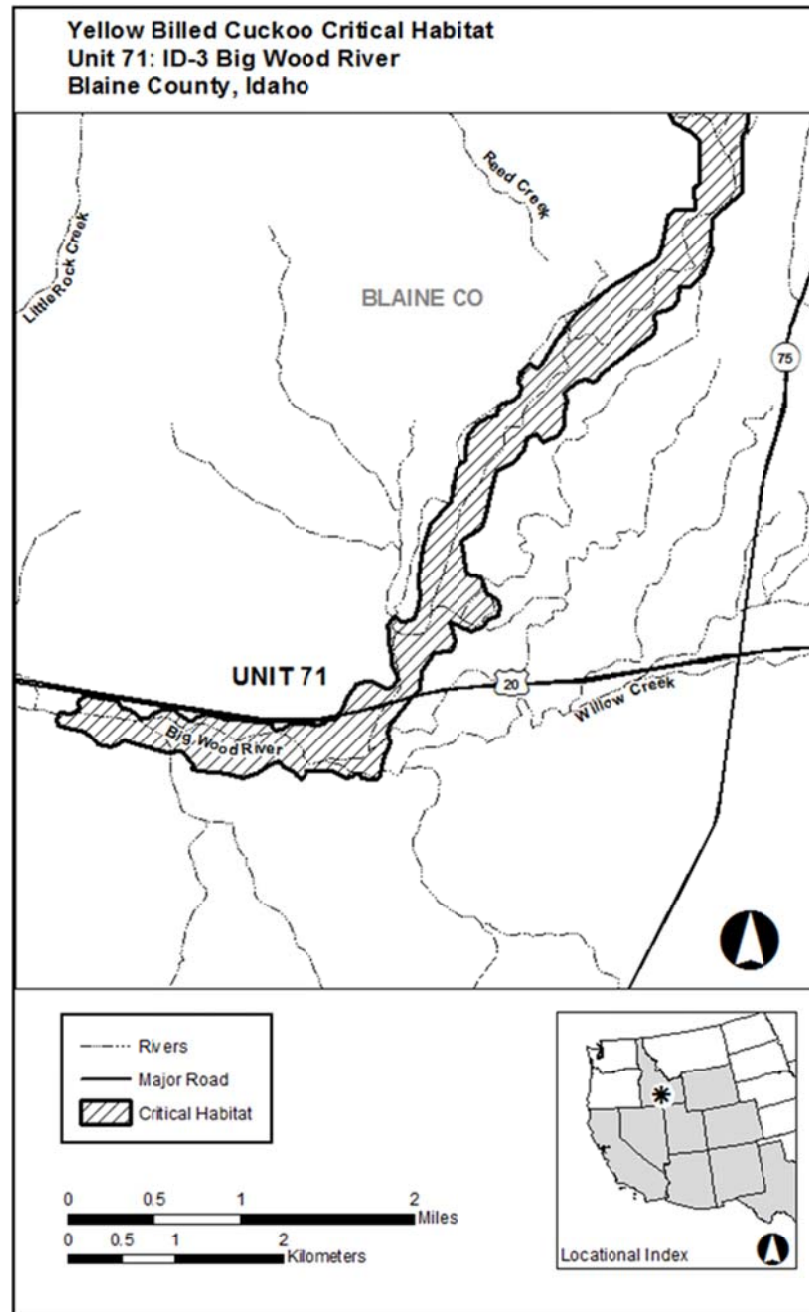


(78) Unit 70: ID-2, Snake River 2; Bonneville, Madison, and Jefferson Counties, Idaho.  
Idaho. Map of Units 70 and 72 follows:



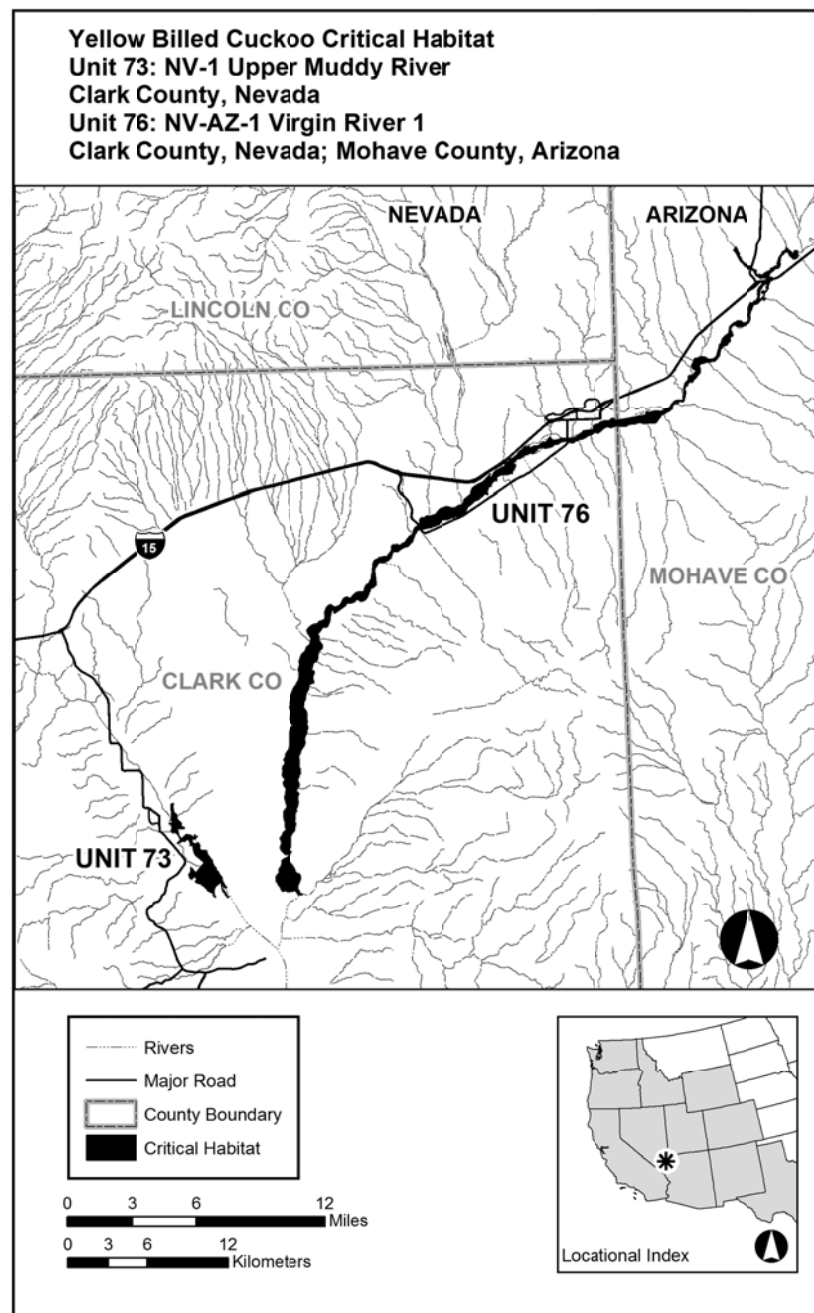
(79) Unit 71: ID-3, Big Wood River; Blaine County, Idaho. Map of Unit 71

follows:



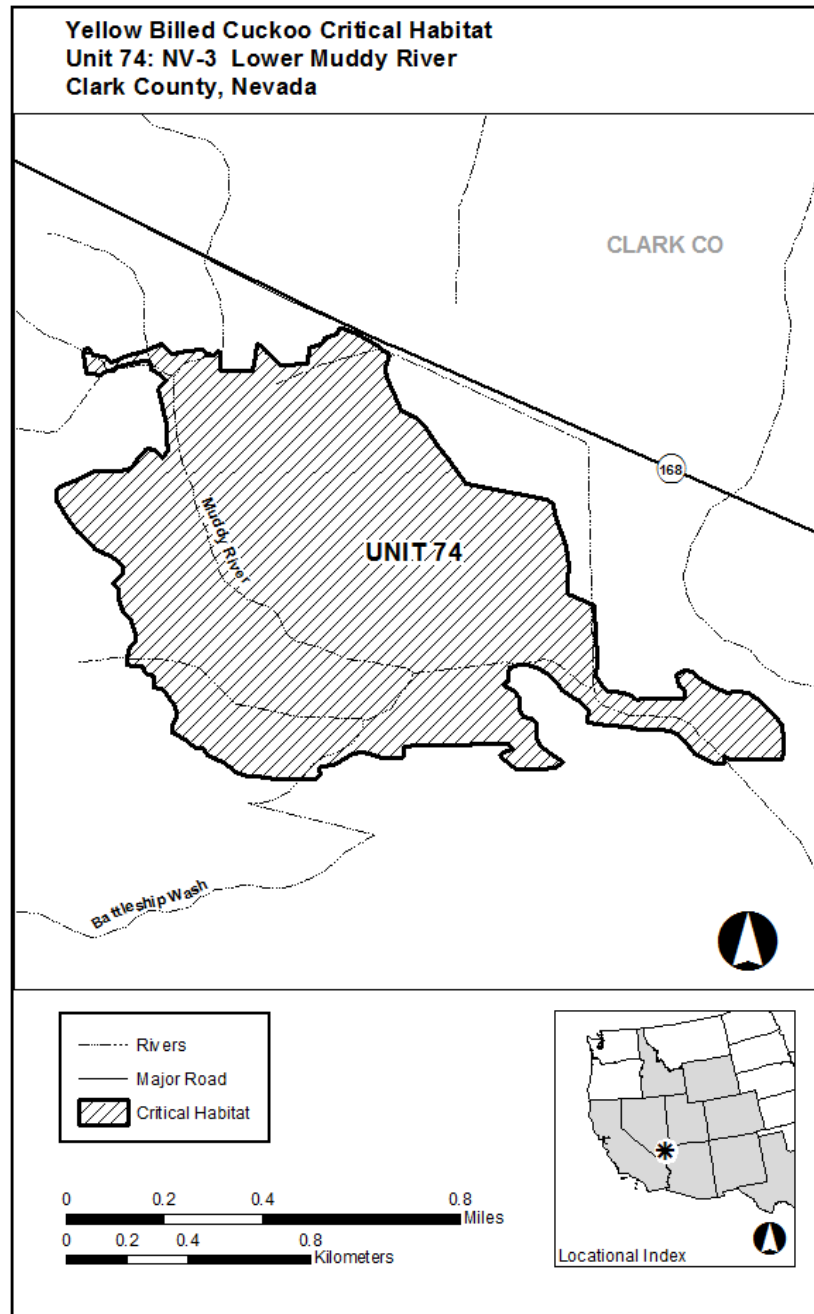
(80) Unit 72: ID-4, Henry's Fork and Teton Rivers; Madison County, Idaho. Map of Unit 72 is provided at paragraph (78) of this entry.

(81) Unit 73: NV-1, Upper Muddy River; Clark County, Nevada. Map of Units 73 and 76 follows:



(82) Unit 74: NV-3, Lower Muddy River; Clark County, Nevada. Map of Unit

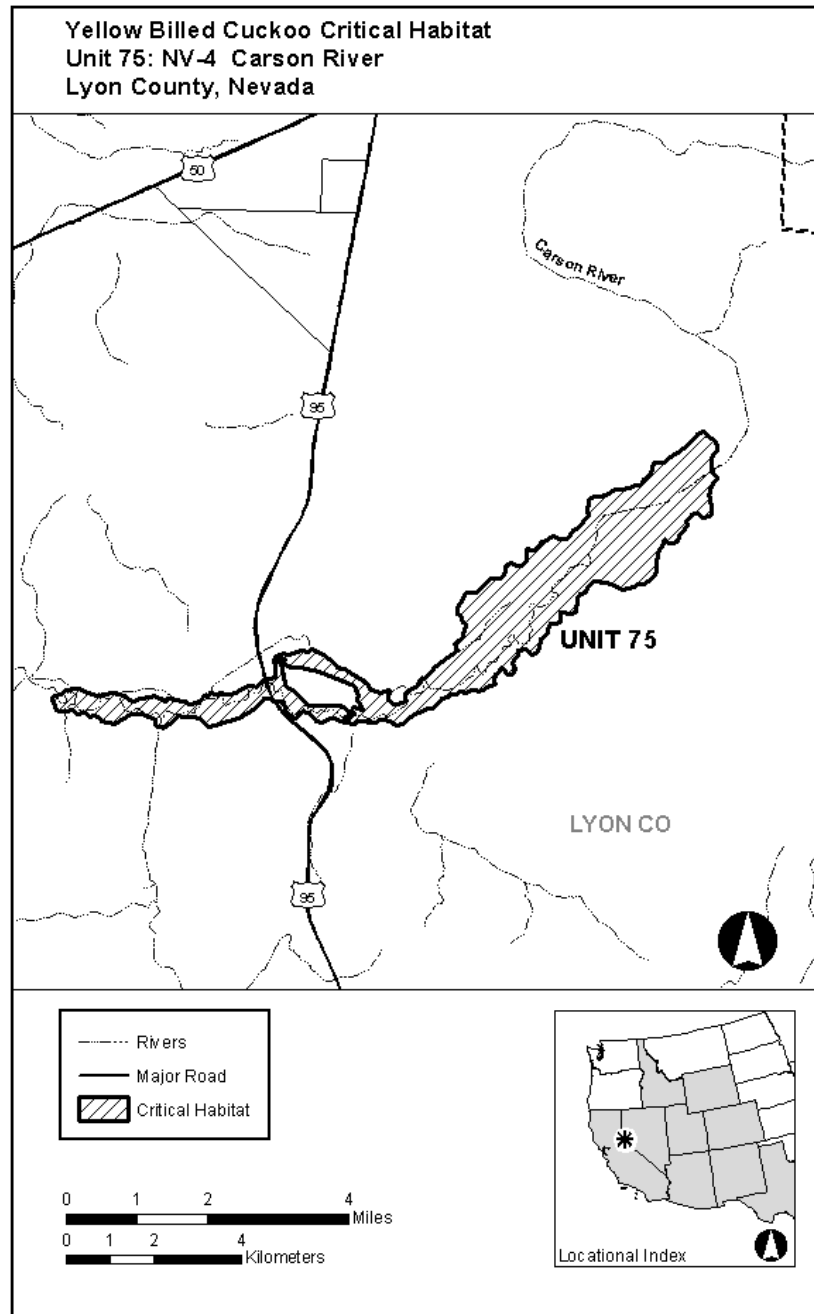
74 follows:





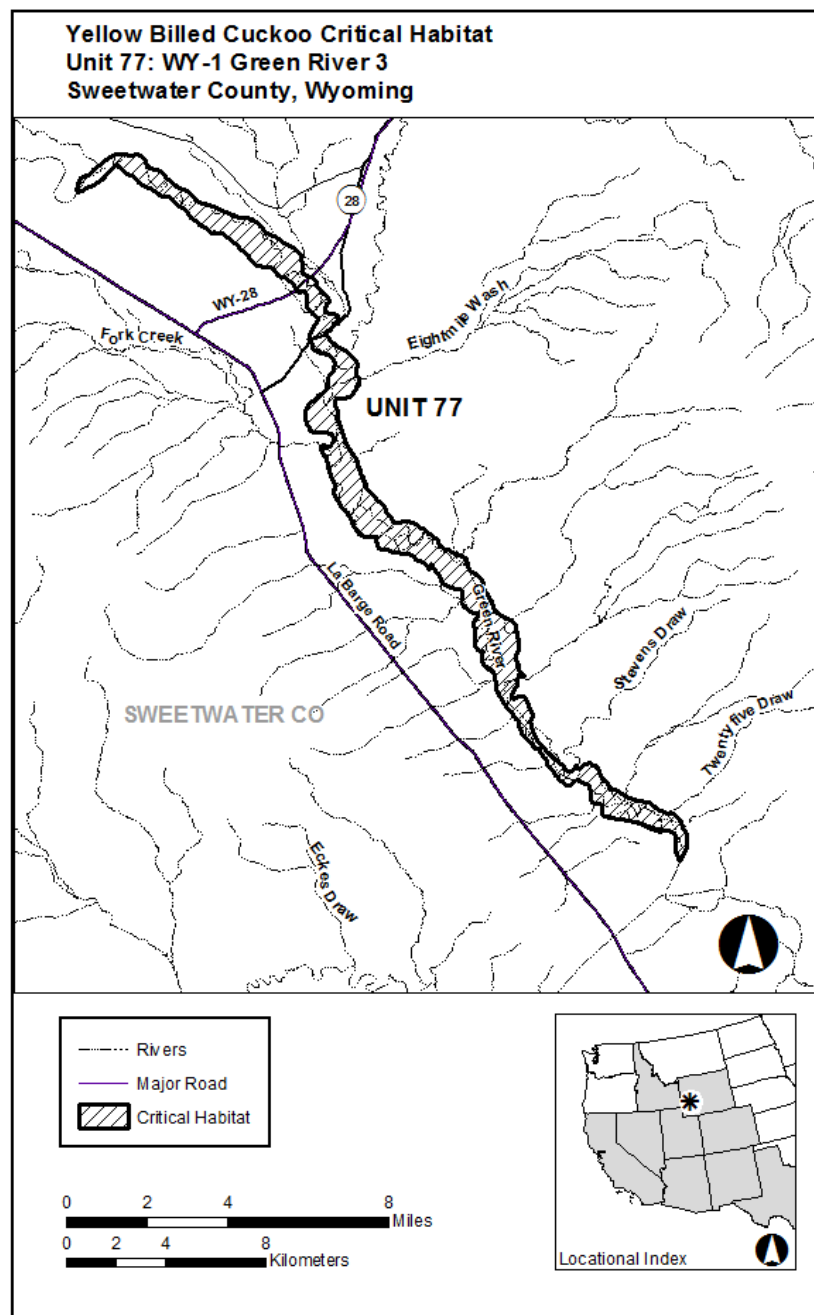
(83) Unit 75: NV-4, Carson River; Lyon County, Nevada. Map of Unit 75

follows:

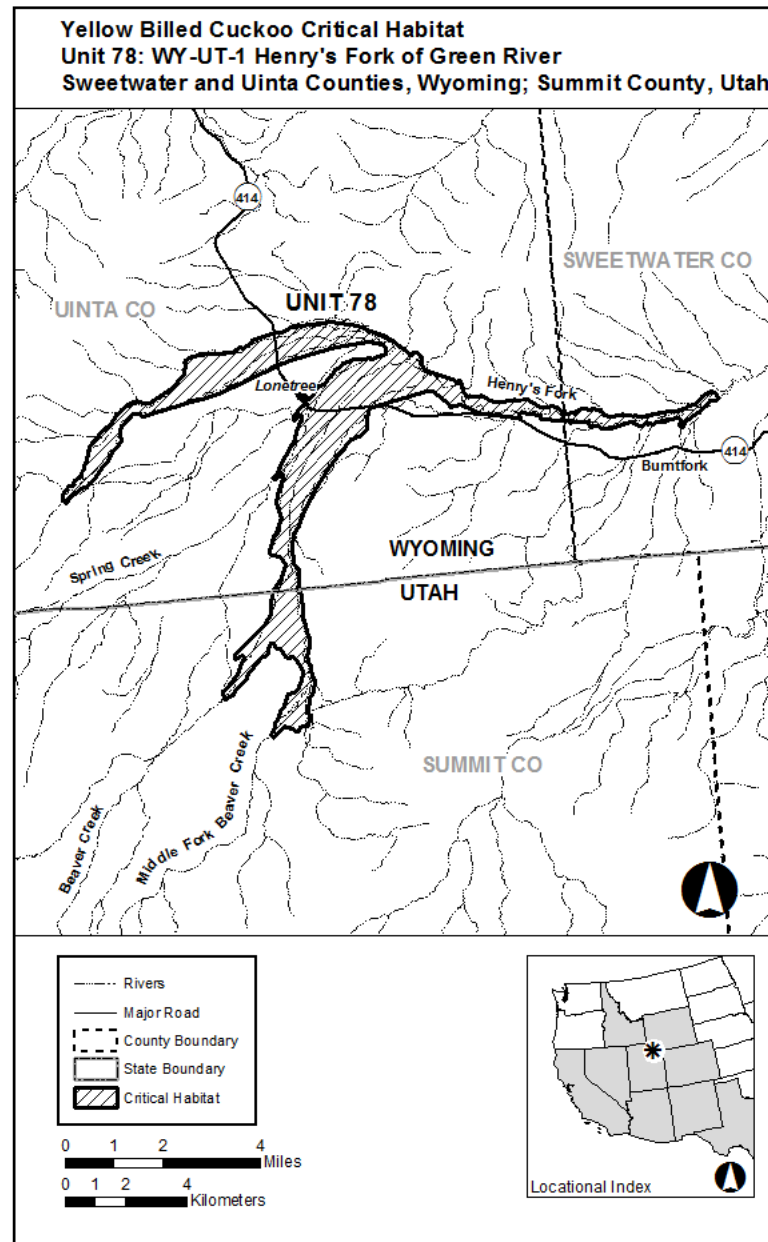


(84) Unit 76: NV/AZ-1, Virgin River 1; Clark County, Nevada, and Mohave County, Arizona. Map of Unit 76 is provided at paragraph (81) of this entry.

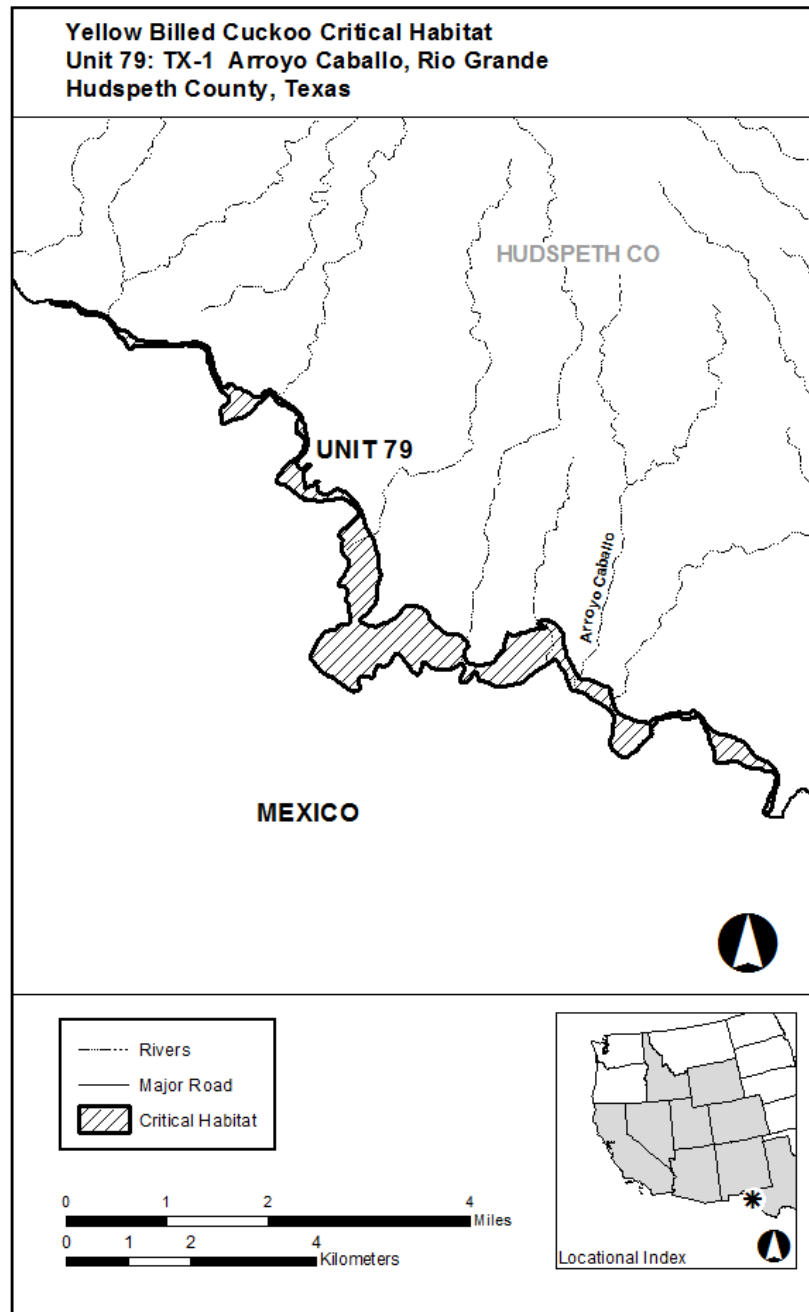
(85) Unit 77: WY-1, Green River 3; Sweetwater County, Wyoming. Map of Unit 77 follows:



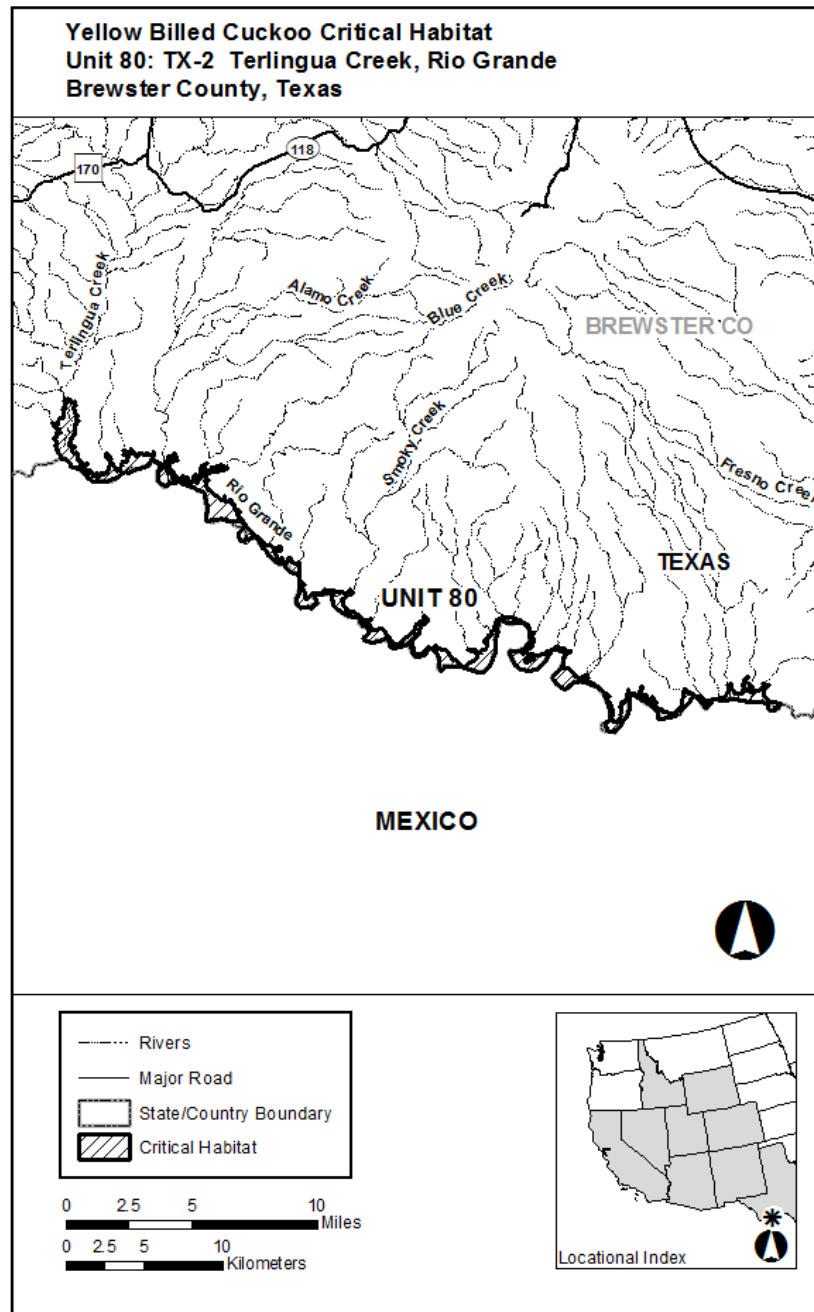
(86) Unit 78: WY/UT-1, Henry's Fork of Green River; Uinta County, Wyoming, and Summit County, Utah. Map of Unit 78 follows:



(87) Unit 79: TX-1, Arroyo Caballo, Rio Grande; Hudspeth County, Texas. Map of Unit 79 follows:



(88) Unit 80: TX-2, Terlingua Creek and Rio Grande; Presidio and Brewster Counties, Texas. Map of Unit 80 follows:



\* \* \* \* \*

**Dated:** June 13, 2014

**Signed:** Rachel Jacobson

Principal Deputy Assistant Secretary for Fish and Wildlife and Parks

**Billing Code 4310–55–P**

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